UNIVERSITY OF NEW MEXICO
BUREAU OF BUSINESS AND ECONOMIC RESEARCH

The Economic Impact of a Growth Rate Ordinance in the City of Santa Fe

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Table of Contents

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This project reflects the input of many. We take responsibility for any errors.

EXECUTIVE SUMMARY

Existing Conditions and Trends

Population and Housing

In terms of population, the City of Santa Fe is growing more slowly than the surrounding area. In the last decade, the population of City increased by 11 percent, the Urban Area outside the City by 62 percent, and the surrounding region by 68. Less than half of the County's population lived in the City in 2000, down from 57 percent in 1990 and 65 percent in 1980.

Reflecting the population trend, more housing is being built outside the City limits and the City is permitting fewer residential units – 510 per year during the 1992-01 period, down from 687 units in the previous 10 years.

Employment

County employment increased by roughly 30 percent over the past decade, mirroring the population increase. However, where 40 percent of the population growth occurred outside the City limits, job growth was concentrated in the City, which remains the employment center.

With the exception of the most recent period (1995-2000), Santa Fe non-agricultural employment has typically increased at faster rates than both the state and the nation. Indeed, between 1960 to 2000 employment in Santa Fe County grew at a compound annual rate of 4.0 percent, versus 2.9 percent in New Mexico and 2.2 percent in the US as a whole.

In 2000, the services sector was the largest in terms of employment, accounting for almost 30 percent of total County covered employment. Government's share of total covered employment is down to 27 percent, followed by the retail trade sector with about 25 percent. Construction employment's share varies from one year to another but was 7 percent in 2000.

Personal Income

Through the 1990's personal income in the Country grew faster than the state and the nation. Wage and salary disbursements accounted for only 43 percent of the County's total personal income in 1999, versus 58 percent nationwide. Dividends, interest and rent and proprietors' income make up larger portions of personal income.

Santa Fe County per capita income is above that of the US, despite the fact that the average wage is only about 80 percent of the US average.

Gross Receipts

Between 1990 and 2000, taxable gross receipts for the City of Santa Fe grew at a compound annual rate of 6.0 percent. Countywide, the figure was 6.8 percent.

In 1990, businesses within the City accounted for 86 percent of total County taxable gross receipts. By 2000, the City's share of the County total had slipped below 80 percent, and was just over 78 percent in 2001, a bad year for Santa Fe and other tourist destinations.

Santa Fe has maintained its share of total taxable gross receipts from retail trade and services. However, the City now accounts for only about half of total taxable gross receipts from construction.

Lessons From Other Communities

Growth limits do not always limit growth. While a number of cities have experienced slower rates of growth with the implementation of limits, the decline is likely due to a combination of factors including declining regional growth and alternative areas for development.

Growth limits may push growth into surrounding areas. The limit, regulatory requirements and uncertainty combine to make development outside the controlled area more attractive. The regional impact of limits can result in increased commuting, automobile congestion and leapfrog development.

Market demand and not land constraints has been recognized as a primary determinant of housing prices. While limits can increase housing prices, the impact is shaped by a variety of other factors, including the structure of local housing markets, the patterns of land ownership, availability of land in surrounding areas, and an inventory of land zoned at different intensities. Additionally, the shift to larger, more profitable housing and quality of life improvements can put upward pressure on housing prices.

The design of the growth controls shapes the impacts. Growth management measures that limit the amount of available land can have disproportionate impacts on rental housing, and low-income and minority households.

Indirect growth controls -- down-zoning residential densities, reducing floor area ratios, more stringent development requirements, delays in processing of building permits -- can restrict growth and impact housing prices and availability.

Growth Control Scenarios

Table ES-1 summarizes the anticipated growth in population, employment, commercial floor area, taxable gross receipts and net taxable value for the four alternative scenarios. The results for each of the scenarios are discussed in the narrative which follows.

Table ES-1
IMPACT OF GROWTH ORDINANCE SCENARIOS

Impact:	Market Growth No Water Shortage	Market Growth Water Shortage	Water Budget Moderate Limits	Water Budget Tight Limits
Urban Area Population, 2000-10:				
Change	9,679	9,570	9,679	8,872
Compound Annual Growth	1.1%	1.1%	1.1%	1.1%
City Employment, 2000-10				
Change	8,491	5,457	8,491	6,877
Compound Annual Growth	1.6%	1.1%	1.6%	1.3%
City Commercial Floor Area, 2003-10				
Square Feet (000)	2,531	1,629	2,497	1,689
City Taxable Gross Receipts, 2000-10				
Compound Annual Growth	3.9%	3.1%	3.9%	3.4%
City Additions to Property Tax Base, 2003-10				
New Taxable Value from New Construction ($000,000)	197	149	195	159

Bureau of Business and Economic Research, University of New Mexico

Baseline: Market Growth – No Water Shortage

Between 2000 and 2010, population in the Urban Area will increase by almost 10,000 – to just under 90,000. Most of the growth will be outside the City limits.

The growing population in the Urban Area is estimated to require 1,974 additional housing units over the first half of the decade and 1,504 during the second half of the decade, as population growth slows.

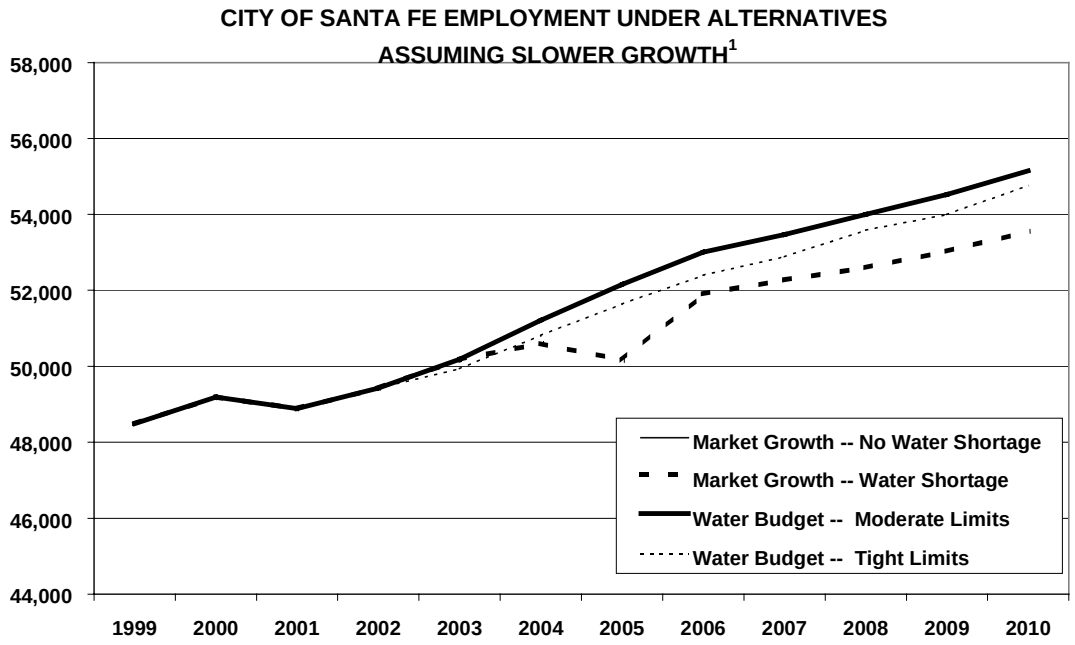
Based on trends, employment in the County is estimated to grow at a compound annual rate of 2.2 percent and employment growth within the City limits will be 1.6 percent. Leading sectors will continue to be retail trade and services.

The thicker solid line in Figure ES-1 on the next page shows the projected trajectory for City of Santa Fe non-agricultural employment under this baseline scenario.

Employment growth over the decade will create demand for 2.5 million square feet of private commercial space within the City of Santa Fe under the trend growth assumptions. The thicker solid line is Figure ES-2, also on the next page, shows the demand for commercial floor area for this scenario.

Economic growth within the City limits will see the gross receipts tax base grow at a compound annual rate of 3.9 percent under trend growth assumptions.

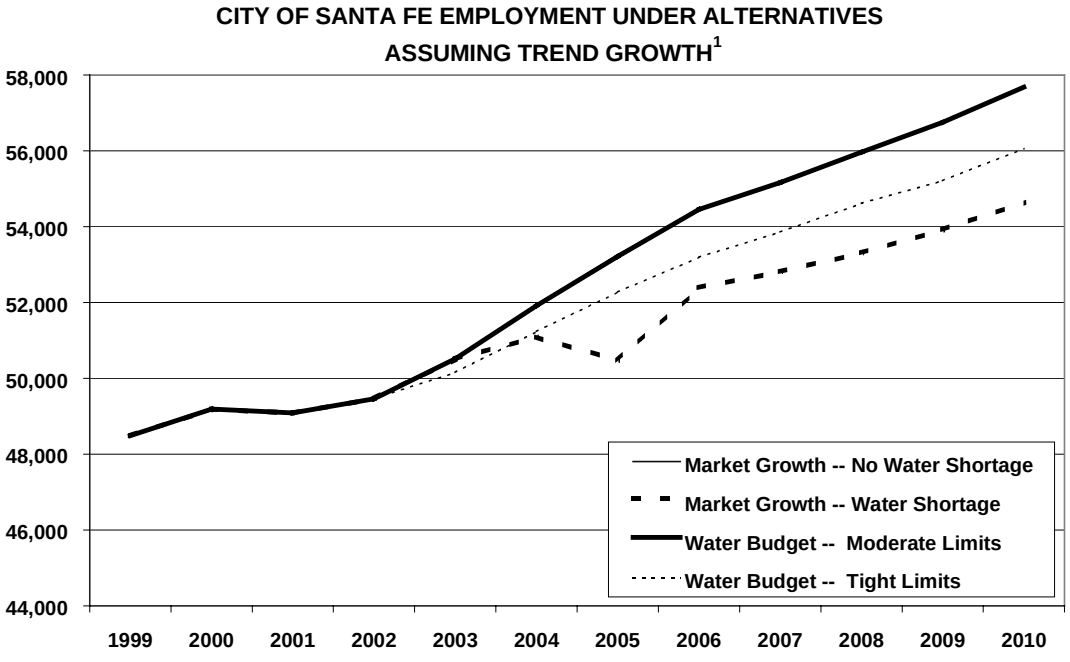
Figure ES-1



1 Water Budget -- Moderate Limits is identical with Market Growth -- No Water Shortage

Source:

Figure ES-2



1 Water Budget -- Moderate Limits is identical with Market Growth -- No Water Shortage

Market Growth – Water Shortage

The water shortage and the City's moratorium on building lowers the projected population change for the 12 month period from 880 to 516 persons and demand for housing units in the Urban Area to 175 from 307. Overall, the population growth for the Urban Area and the Central Region is lower than the baseline projections.

The water shortage and associated moratorium cut the compound annual rate of City employment growth to 1.1 percent under the trend growth assumptions. Employment growth under the water shortage scenario is depicted by the thick dotted line in Figure ES-1. Growth performance over the decade would be improved by decisive policy action to deal with the City's long-term water issues.

If the scenario unfolds as assumed, new commercial construction will be less than 1.3 million square feet and the gross receipts tax base will grow at a compound annual rate of 3.1 percent. The thick dotted line in Figure ES-2 illustrates how the demand for commercial floor area might be affected by the water shortage and building moratorium.

Water Budget – Moderate Limits

The maximum water system hook-ups allowed in this scenario exceed the baseline demand for new housing units, so population growth and housing demand are unaffected.

The limits on commercial space are binding in only one year under the trend scenario and the impacts on construction and employment are negligible. Forecasts for employment and revenue growth are as in the baseline. The effects on the demand for commercial square feet are represented by the thin solid line in Figure ES-2. Note that the line dips below the baseline for one year.

Water Budget – Tighter Limits

Baseline demand for housing units exceeds the number of units allowed between 2000 and 2005 and for the decade as a whole. In the second half of the decade the limits will accommodate the projected slower growth in population and in housing demand. In the first half of the decade, housing unit demand exceeds available residential permits by 408.

The limits on commercial construction are binding in some years under both the trend and the slower growth scenarios, but the impacts are much greater under trend. Total commercial square feet fall to less than 1.7 million and the prohibition on the construction of new hotel rooms further depresses economic growth within the City limits. The slowdown in housing and commercial construction activity is compounded by the slower growth in retail trade and services, as fewer commercial establishments are able to open or to expand. Employment growth in the City is at a compound annual rate of 1.3 percent. The

gross receipts tax base grows at a compound annual rate of 3.4 percent under trend versus the 3.9 percent assumed in the baseline.

The impacts of the tighter limits on employment and on the demand for commercial floor area are illustrated by the trajectories of the thin dotted lines respectively in Figures ES-1 and ES-2.

Case Studies

San Luis Obispo, California

The City of San Luis Obispo adopted growth control measures in the 1980's. The relaxed development policies and growth accommodation in the County have been partly responsible for the consistently lower rate of population increase in the City than the surrounding area, and have probably kept down increases in median single-family home prices. Housing inflation within the City compares favorably with non-growth control cities and has generally been less than statewide.

San Luis Obispo County adopted a growth ordinance in the early 1990's. During most of the decade, the 2.3 percent limit was never encountered, probably because of the slow economy in the County and the larger region.

Boulder, Colorado

With growth control ordinances in place, Boulder has maintained a steady population and housing growth rate of one percent per year for the past twenty years. The surrounding area and state have had growth rates of two to five times Boulder's in the past two decades. The increase of existing home sales prices in the City led the nation between 1991 and 2001, but this was a period of spectacular economic growth for the City of Boulder. The trend was for housing prices to increase with proximity to the City.

Between 1995 and 1999, the City experimented with a commercial growth cap. While the City still serves as an employment and retail center, its role as a regional retail center is declining as retail needs are increasingly met locally in the fast-growing adjacent communities.

Thousand Oaks

Incorporated in 1964, the City of Thousand Oaks was developed under stringent growth controls. During the 1990's, population growth was curbed to 12.5 percent in Thousand Oaks, and, due to county efforts in the County as well. New residential housing was limited to 650-units annually between 1990 and 1994 and then reduced to 500-units. In no year was the 650-unit limit reached, though the number of units permitting since then has exceeded the current 500-unit limit each year. Single and multi-family units were split almost evenly during the first period though multi-family units have comprised less than 10 percent of the total during the latter period. Median home sales prices in the City and the County

have been steadily increasing though have mirrored each other, including during a decline in 1999 and 2000.

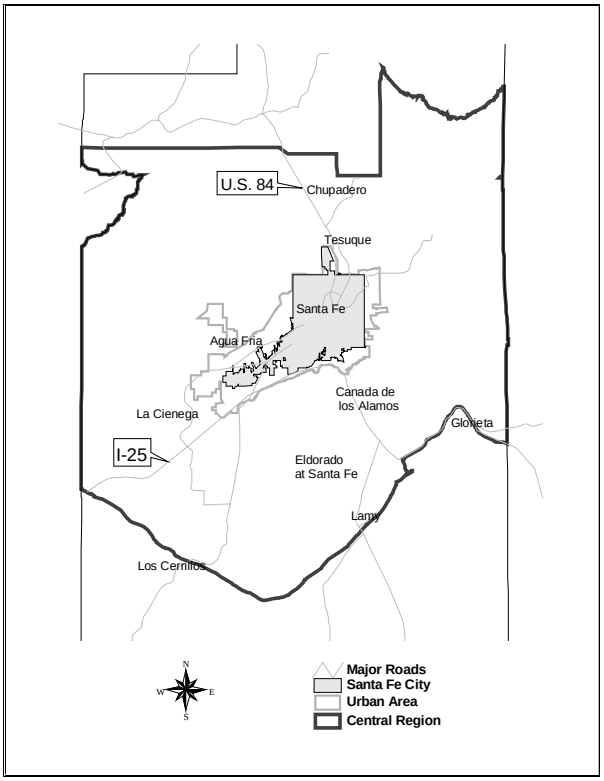
EXISTING CONDITIONS AND TRENDS

As is developed in this report, a range of existing and future economic and demographic factors shape the impacts of growth ordinances. This section presents and analyzes the underlying characteristics of the City of Santa Fe and the surrounding area - including population trends, employment, income, gross receipts taxes, and housing - to help assess the potential impacts of limits on new hook-ups to the City of Santa Fe's water system.

Population Trends

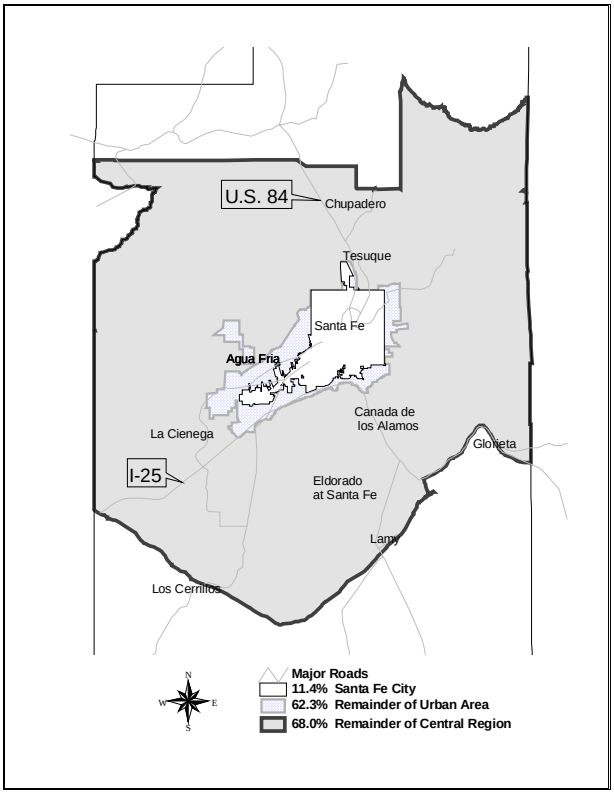
Population and housing are analyzed in a variety of geographic areas due to demographic characteristics, the housing/real estate market, consistency with other studies, and data availability. In addition to Santa Fe County and the City of Santa Fe, these areas include the Central Region of the County and the Urban Area (Map 1.1). The Urban Area contains the City of Santa Fe and also extends southwest to include the Municipal Airport, northwest slightly beyond the Santa Fe Relief Route and southeast to include I-25. The Urban Area contains the Agua Fria Area and Historic Community and the City of Santa Fe. The Central Region includes the Urban Area and surrounding communities such as Agua Fria, La Cienega and El Dorado. Close economic and demographic ties with the City of Santa Fe characterize the Central Region. The 2000 Census tracts in these areas are presented as Appendix A.

Map 1.1
GEOGRAPHIC AREAS



Map 1.2 and Table 1.1 (on the following page) show that population is increasing at faster rates farther away from the City of Santa Fe. Between 1990 and 2000, the population of the City of Santa Fe increased by 11.4 percent (6,344 persons) while the Urban Area outside of the City grew by 62.3 percent (6,660). (Population counts for Santa Fe City are as enumerated and represent the City according to the boundaries in place on January 1 of the year the census was conducted.) As a whole, total Urban Area (including the City and the non-City Urban Area) population increased by 19.5 percent (13,004). In the same time period, the population of the Central Region as a whole increased by 28.4 percent (23,150). The population in the portion of the Central Region outside of the Urban Area increased by 68.0 percent (10,146). The City of Santa Fe's General Plan recognizes that increased development and competition from surrounding areas make it difficult for the City to achieve the compact urban form promoted by the plan.

Map 1.2
POPULATION CHANGE



Of the state's 98 cities (that were incorporated in 1990), the City of Santa Fe ranked forty-second in rate of population change between 1990 and 2000, behind Chama and before Farmington. The County's 30.7 percent rate of change ranked eighth of the state's thirty-three counties, and was almost identical to the rate it experienced the previous decade.

Consistent with the growth rates, the areas surrounding the City are home to increasingly larger portions of the County's population. The Urban Area outside the City increased its share from 10.8 percent to 13.4 percent and the portion of the Central Region surrounding the Urban Area increased from 15.1 to 19.4 percent. The percent of the County's population in the City decreased from 64.8 percent in 1980 to 56.5 percent in 1990 and to 48.1 percent in 2000.

Table 1.1

SANTA FE COUNTY AND SUB-AREA POPULATION, DISTRIBUTION AND CHANGE, 1980 - 2000

	Population			Change
	1980	1990	2000	1990-2000
New Mexico	1,303,303	1,515,069	1,819,046	303,977
Santa Fe County	75,519	98,928	129,292	30,364
Central Region	na	81,451	104,601	23,150
Total Urban Area	na	66,541	79,545	13,004
Santa Fe City	48,953	55,859	62,203	6,344
Urban Area (outside City)	na	10,682	17,342	6,660
Central Region (outside TUA)	na	14,910	25,056	10,146

	Population Percent Change		
	1980-90	1990-2000	1980-2000
New Mexico	16.2	20.1	39.6
Santa Fe County	31.0	30.7	71.2
Central Region	na	28.4	na
Total Urban Area	na	19.5	na
Santa Fe City	14.1	11.4	27.1
Urban Area (outside City)	na	62.3	na
Central Region (outside TUA)	na	68.0	na

	Percent of County Population		
	1980	1990	2000
Santa Fe County	100.0	100.0	100.0
Central Region	na	82.3	80.9
Total Urban Area	na	67.3	61.5
Santa Fe City	64.8	56.5	48.1
Urban Area (outside City)	na	10.8	13.4
Central Region (outside TUA)	na	15.1	19.4

na - not available.

Source: U.S. Bureau of the Census, Decennial Censuses.

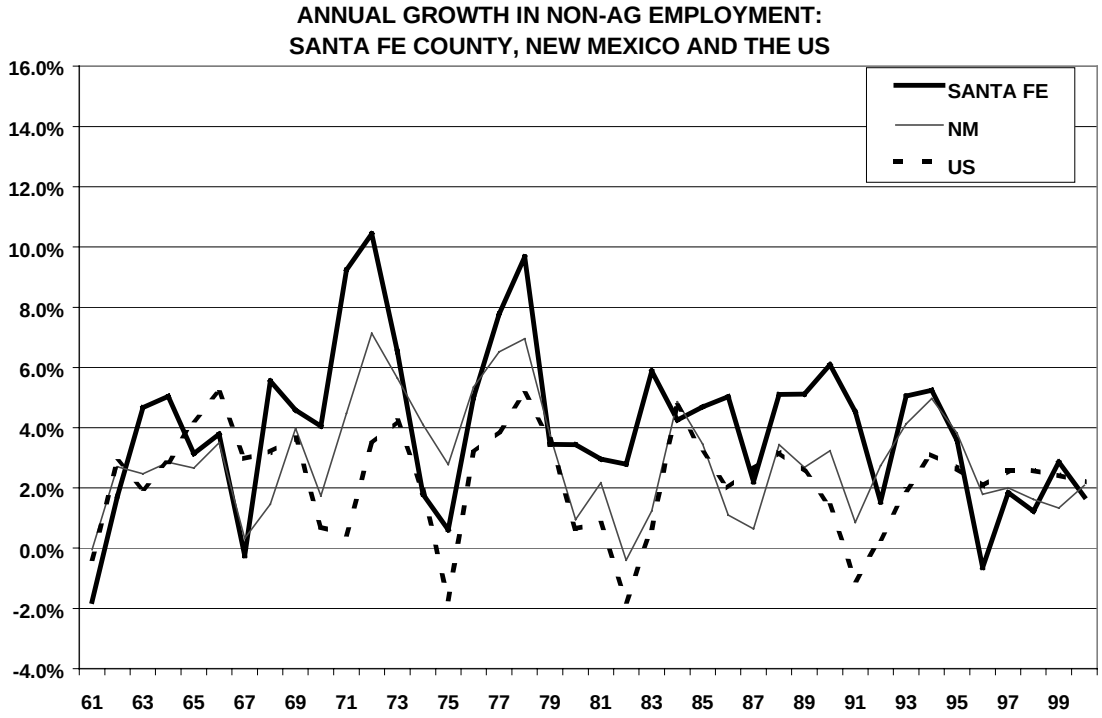
Employment Trends

During the decade of the 1990's, non-agricultural employment in Santa Fe County increased by more than 13,000 jobs. Employment growth over the

decade was roughly 30 percent, virtually identical with the percentage increase in population. However, in contrast with population, where 40 percent of the growth occurred outside the City limits, job growth was concentrated geographically, largely within the City of Santa Fe.

Figure 1.1 provides a long-term perspective on non-agricultural employment growth in Santa Fe County compared with New Mexico and the US. Note that with the exception of the most recent period (1995-2000), the Santa Fe economy has typically outperformed both the state and the nation as a whole in terms of annual rates of employment growth. Indeed, over the entire 1960 to 2000 period, employment in Santa Fe County grew at a compound annual rate of 4.0 percent, versus 2.9 percent in New Mexico and 2.2 percent in the US as a whole.

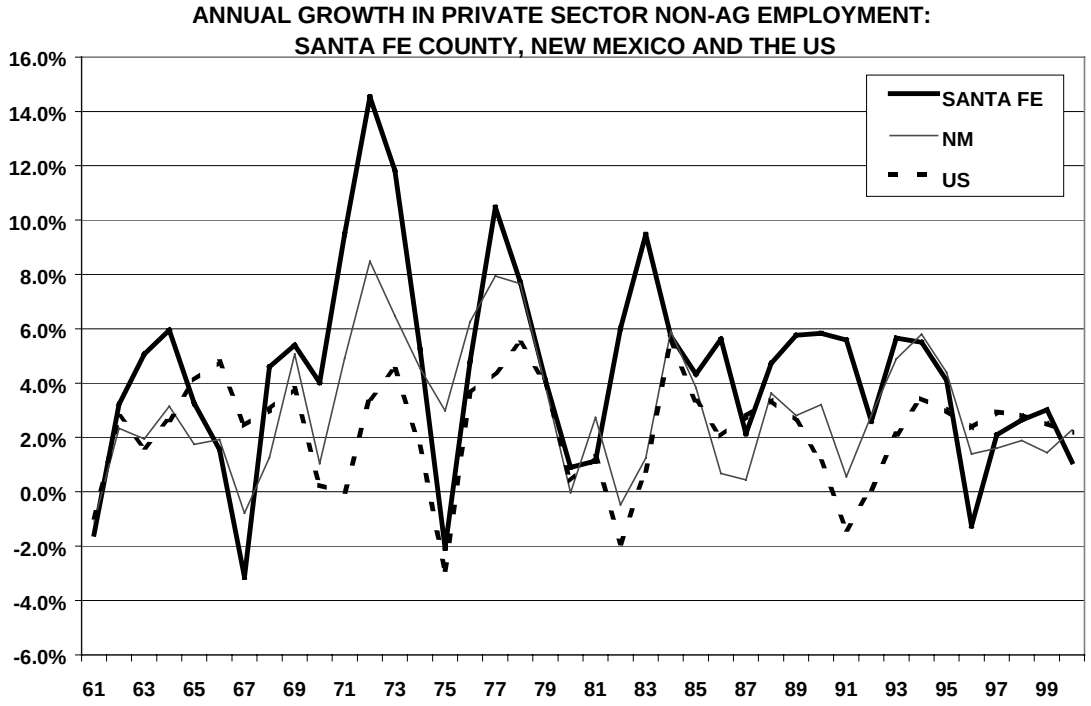
Figure 1.1



Government employment accounted for about 27 percent of total non-farm employment in Santa Fe County in 2000. In contrast, government employees comprise roughly one quarter of New Mexico total employment and about 16 percent of total US employment. Factoring out government employment, Figure 1.2 compares average annual growth rates for private sector employment in Santa Fe County with those for New Mexico and the US. The scale on Figure 1.2 is identical with that on the previous figure. Note the greater volatility in private sector employment. Also note that the performance of the private sector in the County during 1995-2000 was at best mediocre. This was a period of sustained economic prosperity at the national level; however in New Mexico

private sector employment growth fell off sharply in 1996 and remained at or below 2 percent through the end of the decade.

Figure 1.2



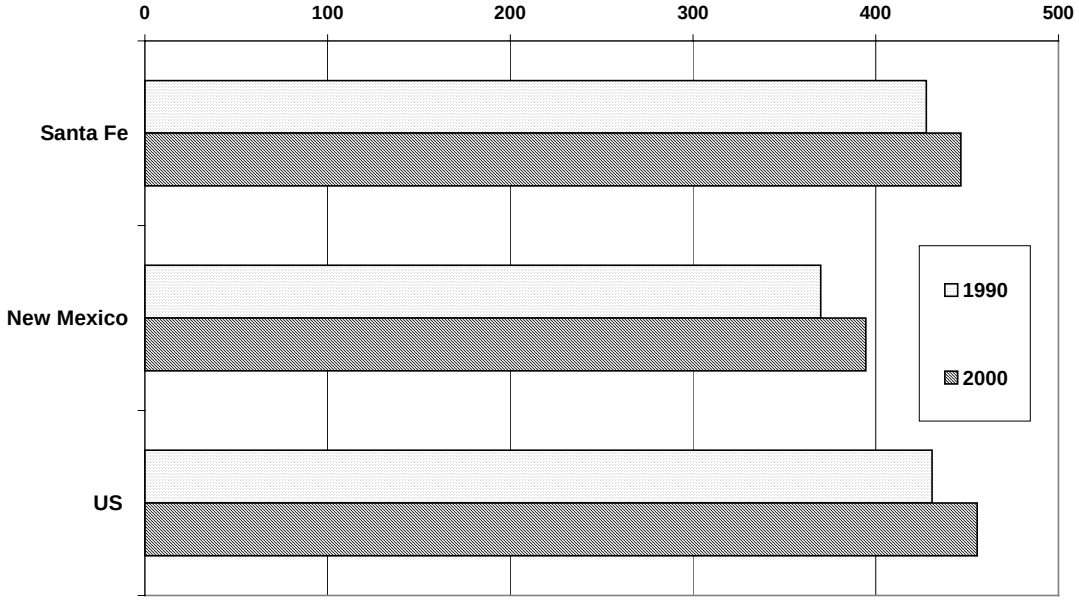
Sector Analysis

The following section examines developments in each industry sector in Santa Fe County in the 1990's. For the period 1990 to 2000, employment data that is used for this analysis is from the New Mexico Department of Labor's Covered Employment Series. Earnings data is from the US Bureau of Economic Analysis, which provides data for detailed industries that spans the 10-year period between 1989 and 1999, the most recent years for which such data are available.

First, employment per 1,000 of population in Santa Fe County is compared with the US and New Mexico. Figure 1.3 presents the data for total covered employment for both 1990 and 2000. In both years note that jobs per capita for Santa Fe County is comparable to that for the US in both years. Note also that in all cases covered employment per capita increased over the decade. Next, Table 1.2 displays covered employment by sector for Santa Fe County, New Mexico, and the US in 1990 and 2000.

Figure 1.3

TOTAL COVERED EMPLOYMENT PER 1,000 POPULATION



Data: New Mexico Department of Labor,
1990 and 2000 Census

Table 1.2

COVERED EMPLOYMENT BY SECTOR, 1990 AND 2000
SANTA FE COUNTY, NEW MEXICO AND THE US

	SANTA FE COUNTY			NEW MEXICO			UNITED STATES		
	1990	2000	Percent Change	1990	2000	Percent Change	1990	2000	Percent Change
Total Covered Employment	42,305	57,737	36.5%	560,599	717,593	28.0%	108,658,056	129,925,813	19.6%
Total Private Employment	30,283	42,293	39.7%	429,835	564,431	31.3%	90,904,799	110,064,902	21.1%
Agriculture, Forestry, and Fishing	313	709	126.4%	11,328	16,169	42.7%	1,467,718	1,911,603	30.2%
Mining	136	177	30.1%	16,148	15,285	-5.3%	711,389	535,719	-24.7%
Construction	2,837	3,973	40.0%	29,546	44,970	52.2%	5,065,475	6,622,983	30.7%
Manufacturing	1,865	1,695	-9.1%	43,506	42,886	-1.4%	19,143,321	18,424,648	-3.8%
Transportation & Public Utilities	960	1,125	17.3%	27,436	35,190	28.3%	5,502,673	6,792,057	23.4%
Wholesale Trade	958	1,214	26.7%	24,652	27,652	12.2%	6,209,264	7,002,619	12.8%
Retail Trade	9,789	13,395	36.8%	113,376	146,408	29.1%	19,659,098	23,302,044	18.5%
Finance, Insurance & Real Estate	2,000	2,986	49.3%	25,510	30,897	21.1%	6,599,921	7,436,079	12.7%
Services	11,425	17,001	48.8%	138,308	204,669	48.0%	26,387,343	37,686,176	42.8%
Unclassified	2	18	914.3%	25	305	1120.0%	na	350,974	na
Government	12,022	15,445	28.5%	130,764	153,162	17.1%	17,753,257	19,860,911	11.9%

na -- not available

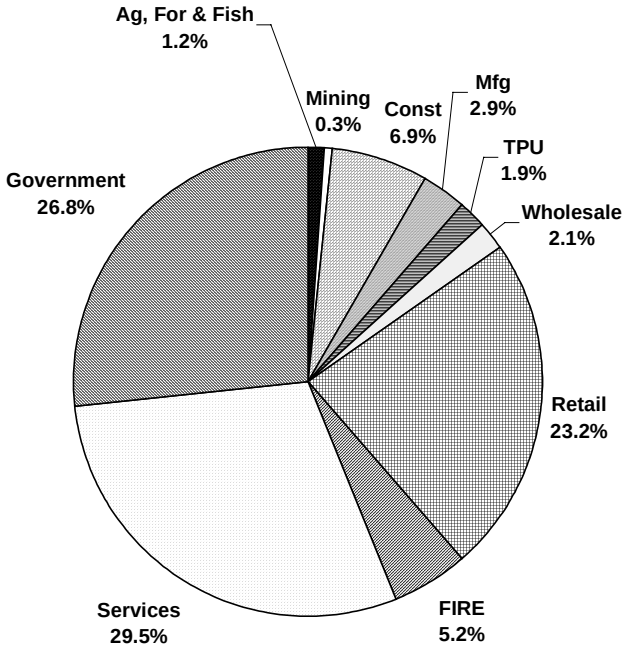
Sources: New Mexico Department of Labor; US Department of Commerce, Bureau of Economic Analysis; and Bureau of Business and Economic Research.

Figure 1.4, on the following page, displays the composition of Santa Fe County covered employment in 2000. Over the decade the government sector shrank relative to the rest of the economy and this occurred despite the rise of Indian gaming (which is classified as government employment). The manufacturing sector also became even less important, accounting for only 2.9 percent of

covered employment in 2000. Note that the top three sectors -- services (29.5%), government (26.8%), and retail trade (23.2%) -- constitute about 80% of total covered employment. Compared to the US, the Santa Fe County economy gained considerable jobs from 1990 to 2000 due to faster growth in the retail trade, FIRE, and service sectors.

Figure 1.4

COMPOSITION OF SANTA FE COVERED EMPLOYMENT, 2000



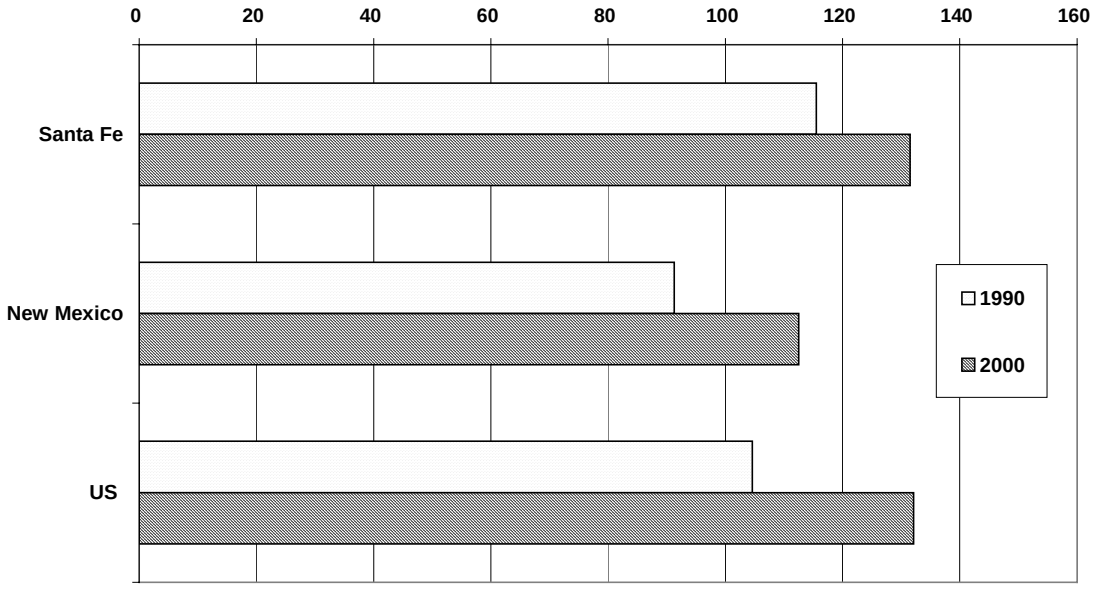
Source: New Mexico Department of Labor.

Services Sector

The services sector accounted for 17,000 jobs in 2000, adding about 5,600 jobs over the decade. The sector increased its share of total covered employment, at government's expense, from 27 percent to 30 percent between 1990 and 2000. Employment in the County's services sector grew by 49 percent over the decade compared to 48 percent in New Mexico and 43 percent in the US. Figure 1.5 presents the jobs per 1,000 in population comparisons. Jobs per capita in the services sector rose in the County, state, and the US during the 1990's, but by virtue of its more modest population growth, the increase was more dramatic in the US as a whole. In terms of service jobs per 1,000, the County compares favorably with the state and is almost on par with the US in 2000.

Figure 1.5

TOTAL SERVICE SECTOR EMPLOYMENT PER 1,000 POPULATION



Data: New Mexico Department of Labor, 1990 and 2000 Census

In 2000, about 4,000 jobs in the services sector were in health services, while lodging accounted for 2,666. Amusements (1,637), business services (1,568), and technical and business services (1,549) were other major sub-sectors. Major events occurring in the services sector during the 1990's include the downsizing at St. Vincent's Hospital in the late 1990's, and the closure of Pinon Hills Hospital in 1999 (both in health services).

Earnings data from the US Bureau of Economic Analysis reveals interesting industry patterns in the services sector. Compared to New Mexico and the US, Santa Fe County experienced relative earnings growth across the service sector with the largest gains in engineering and management services, amusement and recreation services, and educational services. Compared to the nation, relative declines occurred in business services, miscellaneous services, and motion pictures.

Santa Fe's technology oriented enterprises mostly show up in the services sector. These businesses and non-profits generally are small employers but often are on the cutting edge, frequently with a focus on biotechnology. Many have links or are spin offs of Los Alamos National Laboratory. The Santa Fe Institute and the National Center of Genome Resources have led to the founding of a couple dozen businesses in Santa Fe and Los Alamos. The Santa Fe Institute was founded in 1984 by LANL researchers and models complexity theory and dynamic systems. The National Center for Genome Resources

opened in 2000, initially employed 50 and plans to double in two years. Businesses Bioreason (1998) and Cytoprint (2001) are LANL spin-offs in bio-informatics. Another related business, Biolaw Group, advises clients on ethical issues and regulations in the field. Bios Group, which develops software to simulate stocks and commodities, was founded through the Santa Fe Institute.

Tech services are represented in Santa Fe as well, and include Educational Credit Management and Policy Studies call center. One of the largest tech services firms is Los Alamos Tech Associates (located in Los Alamos), which had a multi-year contract to clean up the Rocky Flats site near Denver. Additionally, many other tech services and software businesses are located in the Santa Fe MSA. Relocating businesses are Optimay of Germany, a communications software maker, which opened a facility in Santa Fe in the mid-decade. In late 2001, Optical Insights, which does biomedical and industrial imaging, moved its start-up operation to Santa Fe.

Government

The government sector in Santa Fe County employed 15,450 in 2000, a gain of 3,400 jobs between 1990 and 2000. Employment in the government sector grew 28.5 percent in Santa Fe County over the decade, compared to 17 percent in New Mexico as a whole, and 12 percent in the US. However, the sector's share of total covered employment fell from about 30 percent to 27 percent during this period, and government slipped to second place behind the services sector in terms of employment. Figure 1.6 portrays the County's high level of government employment, which measured 119 per 1,000 of population, vis-à-vis the entire state and nation. In all three jurisdictions per capita employment declined slightly during the decade.

The government sector is composed of state, local, and federal sub-sectors. In 2000 local government employed about 4,700, state government 9,350, and the federal government over 1,400. Five of the six top employers in Santa Fe in 2000 in employment terms are in the government sector: State of New Mexico, Santa Fe Public Schools (1,850), US Government (1,750), City of Santa Fe (1,500), Santa Fe Community College (700).

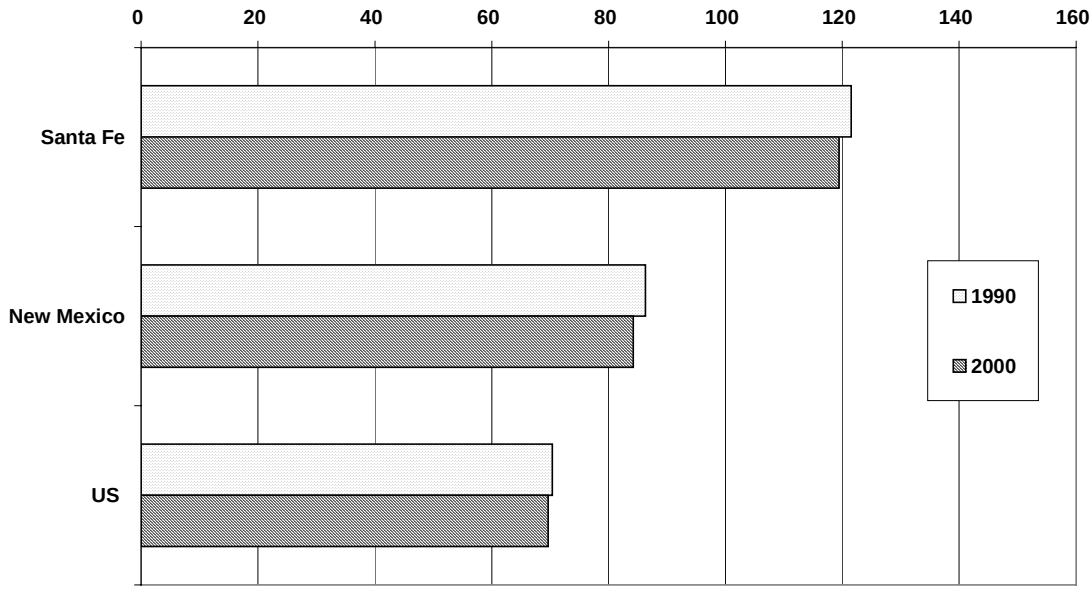
Local government job growth jumped 47 percent, adding nearly 1,500 jobs. The opening of two casino complexes, one at Pojoaque Pueblo (Cities of Gold) and the other at Tesuque Pueblo (Camel Rock), helped to boost employment levels in local government (where Native American enterprises are reported). Pojoaque Pueblo, which employs about 1,000 (many of which are classified in local government), has aggressively diversified its economic base by building a retail center, supermarket, medical building, business park, and is developing two golf courses.

State government employment increased 28 percent, with over 2,000 new jobs added to the rolls in New Mexico's state capital. Virtually all of the increase

occurred during 1990-1993, and thereafter employment levels flattened under Governor Johnson.

Figure 1.6

TOTAL GOVERNMENT EMPLOYMENT PER 1,000 POPULATION



Data: New Mexico Department of Labor, 1990 and 2000 Census

US government employment, however, dipped 6 percent with a loss of nearly 100 jobs. Several agencies of the US Department of Interior have operations in Santa Fe, including the Bureau of Land Management, the Forest Service (Santa Fe National Forest will add 300 jobs over a few years in order to thin out trees), and the National Park Service, which reorganized its regional operations and reduced employment. Several other federal agencies, such as the Federal Highway Administration and the Veterans Administration (which operates a clinic and oversees a cemetery), employ personnel in Santa Fe. The New Mexico Army National Guard is also located in the County. Moreover, Los Alamos National Labs, which cut employment mid-decade then recovered some of these positions later, provides jobs to many who live in Santa Fe County.

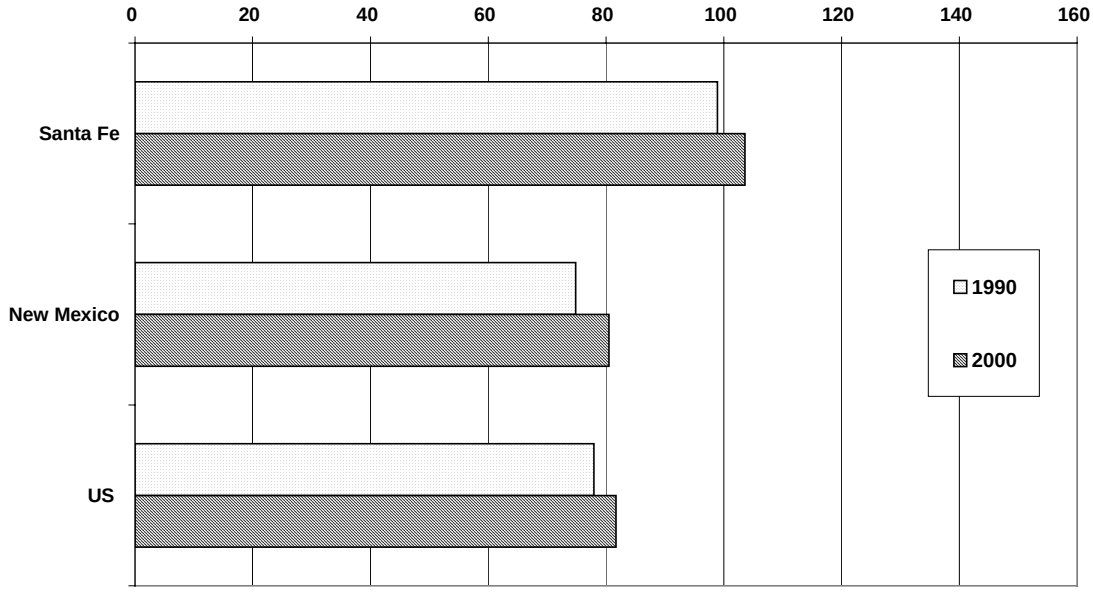
Retail Trade

The retail trade sector accounted for about 13,400 jobs, approximately a quarter of total Santa Fe County covered employment in 2000. The sector added about 3,500 jobs over the decade, although its share of total employment remained at 23 percent. Employment in the County's retail trade sector grew 37 percent over the decade, compared to 29 percent in New Mexico, and 18.5 percent in the US. Figure 1.7 displays that employment per capita in retail trade increased in Santa Fe County, New Mexico, and the US during the 1990's. Santa Fe County is

higher than New Mexico and the US, both of which have similar levels, in terms of retail jobs per 1,000 of population.

Figure 1.7

TOTAL RETAIL TRADE EMPLOYMENT PER 1,000 POPULATION



Data: New Mexico Department of Labor, 1990 and 2000 Census

Since the mid-1990's several large national retailers have opened stores in Santa Fe, including Target, Home Depot, and Borders Books. Lately, merchandisers, such as Best Buy, Old Navy, TJ Maxx, and Baillos have also located stores in the city. Montgomery Ward's and Furrows, on the other hand, closed their stores. In addition, several chain restaurants, including steakhouses, opened in Santa Fe. Eating and drinking places (restaurants and bars), typically identified as a tourism indicator, comprises a large portion of the retail trade sector with about 5,000 jobs in 2000. Several food stores opened in Santa Fe as well, including Wild Oats (which took over Alfalfas), Whole Foods, Albertson's, and Smith's, which replaced Furr's. Having more shopping choices available to north central New Mexico consumers has helped to keep local dollars in the region by stemming retail leakage to Albuquerque and has helped increase local tax receipts.

The retail trade sector in Santa Fe had modest growth compared to New Mexico, yet significant and broad growth that included most major retail industries versus the US. Retail industries in Santa Fe that did well against the state include apparel and accessory stores, food stores, and home furniture and furnishings.

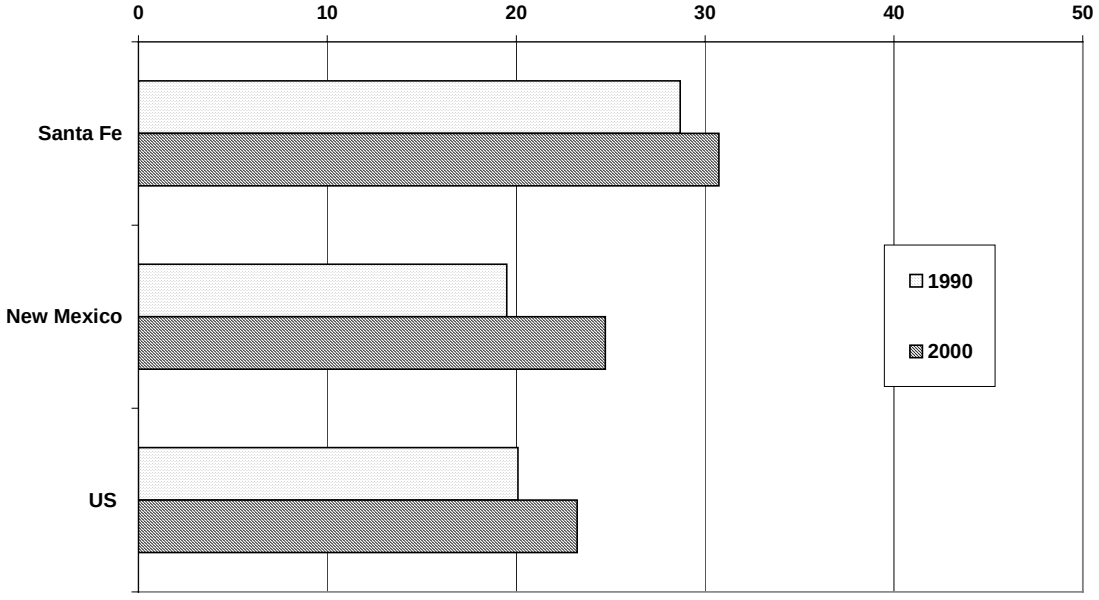
Construction

Construction in the County provided nearly 4,000 jobs in 2000 compared to 2,837 in 1990 (Figure 1.8). The construction sector grew 40 percent and the sector's share of total covered employment increased slightly from 6.4 percent to 6.9 percent between 1990 and 2000. Construction employment in the County grew at a faster rate than the US (31%), but at a slower rate than New Mexico (52%). Per capita construction employment rose for Santa Fe, New Mexico, and the US. The figure also shows the 31 construction jobs per 1,000 population in the County are significantly higher than for the US and New Mexico.

Larger construction projects in the 1990's in the County included a new community center, the expansion of the Glorieta Conference Center, casino/hotels, budget hotels, retail shopping centers, "big box" stores and state building projects that included a library/archives. In addition, the New Mexico Highway 599 by-pass funded by WIPP funds was built during the decade. Santa Fe continued to experience both middle income and upscale residential development throughout the decade, which was particularly evident during the real estate boom of the early 1990's that began in the late 1980's. Recently, Santa Fe construction enterprises have been involved in rebuilding in Los Alamos from the Cerro Grande fire. A new public safety complex was built and several prominent Santa Fe hotels have been upgrading and expanding.

Figure 1.8

TOTAL CONSTRUCTION EMPLOYMENT PER 1,000 POPULATION



Data: New Mexico Department of Labor, 1990 and 2000 Census

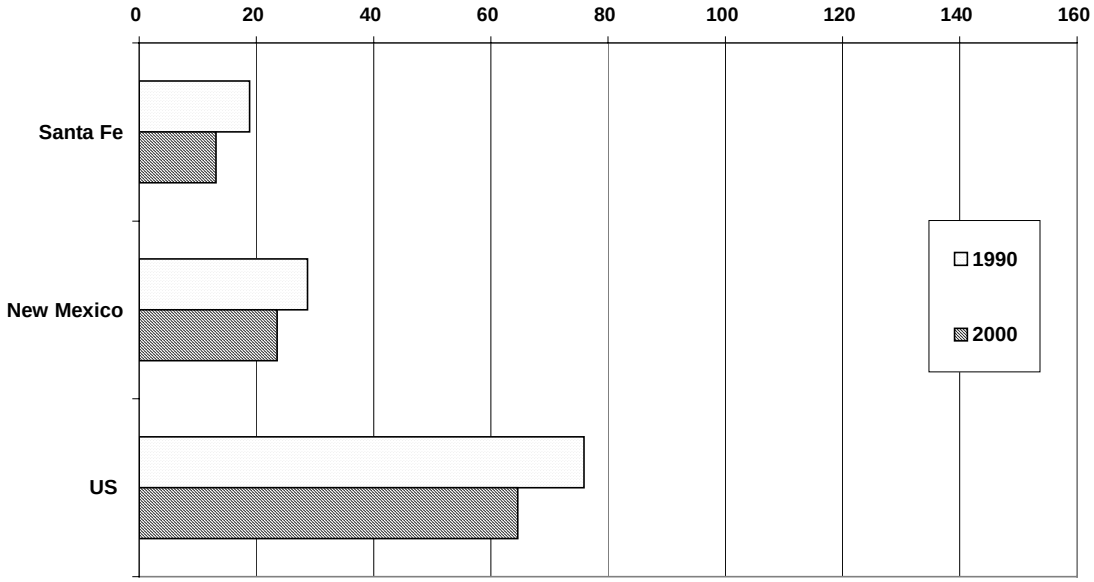
Manufacturing

Figure 1.9 examines the manufacturing industry, which in Santa Fe County is small, and is of shrinking importance in employment terms. Manufacturing's share of total covered employment in the County slipped from 4 percent to 3 percent during 1990-2000 (from 19 to 13 jobs per 1,000 of population). The sector also declined in New Mexico and the US both on a per capita and number of jobs basis, but by less than in Santa Fe. Manufacturing employed about 1,700 in 2000. The sector lost 170 jobs, representing a 9 percent decline, between 1990 and 2000.

Durable goods manufacturing declined during the 1990's, while non-durable goods producers gained in Santa Fe. Notably, the printing and publishing industry exhibited substantial growth in Santa Fe. Other small industries that had significant gains included lumber and wood products, primary metals, and fabricated metals. Small manufacturing industries that lost ground included furniture and fixtures; stone, clay, and glass; and industrial machinery and equipment. Two manufacturers, one of furniture and the other of stationary, closed shop mid-decade.

Figure 1.9

TOTAL MANUFACTURING EMPLOYMENT PER 1,000 POPULATION



Data: New Mexico Department of Labor, 1990 and 2000 Census

Finance, Insurance and Real Estate

The finance, insurance and real estate (FIRE) sector is another small but relatively important sector in Santa Fe County. FIRE's share of County employment increased from 4.5 percent to 5.2 percent between 1990 and 2000.

In 2000, nearly 3,000 jobs were in the FIRE sector. Employment grew a strong 49 percent, the fastest growth of the major sectors (excluding agriculture), with nearly 1,000 jobs added during this period. FIRE employment per capita in Santa Fe was substantially higher and growing compared to New Mexico, and lower than but closing in on US employment.

Earnings data show that the FIRE sector's growth in Santa Fe relative to New Mexico and the US occurred across industries in the sector, especially in holding companies and other investment offices, real estate, and security and commodity brokers. Depository and non-depository institutions and the insurance industry saw moderate growth. After the real estate boom years, from the late 1980's to 1994, Santa Fe's residential market calmed in the second half of the decade.

Transportation and Public Utilities

Transportation and public utilities (TPU) includes electricity, natural gas, communications, and water and sewer when under private ownership. Santa Fe per capita employment slipped while both New Mexico and the US saw modest increases. This is another sector that is relatively less important in the County than elsewhere, comprising only 2 percent of total covered employment. The number of jobs increased from 960 to 1,125 during 1990-2000. This 17 percent growth rate in the TPU sector lagged New Mexico and the US. The communications industry, however, grew faster in Santa Fe than in New Mexico. Lately, Cricket Communications, a wireless provider, opened its New Mexico headquarters in Santa Fe.

Wholesale Trade

Wholesale trade is another small sector (part of the larger trade sector), representing 2 percent of total employment and just over 1,200 jobs in the Santa Fe economy. Growth in the sector was a modest 27 percent, adding about 250 jobs during the 1990's, but was over twice that of the sector's growth in New Mexico and the US. Wholesale trade employment is much smaller, at 9 per 1,000 of population, in Santa Fe County compared to New Mexico and the US. In all three jurisdictions wholesale trade employment per capita declined slightly during 1990-2000.

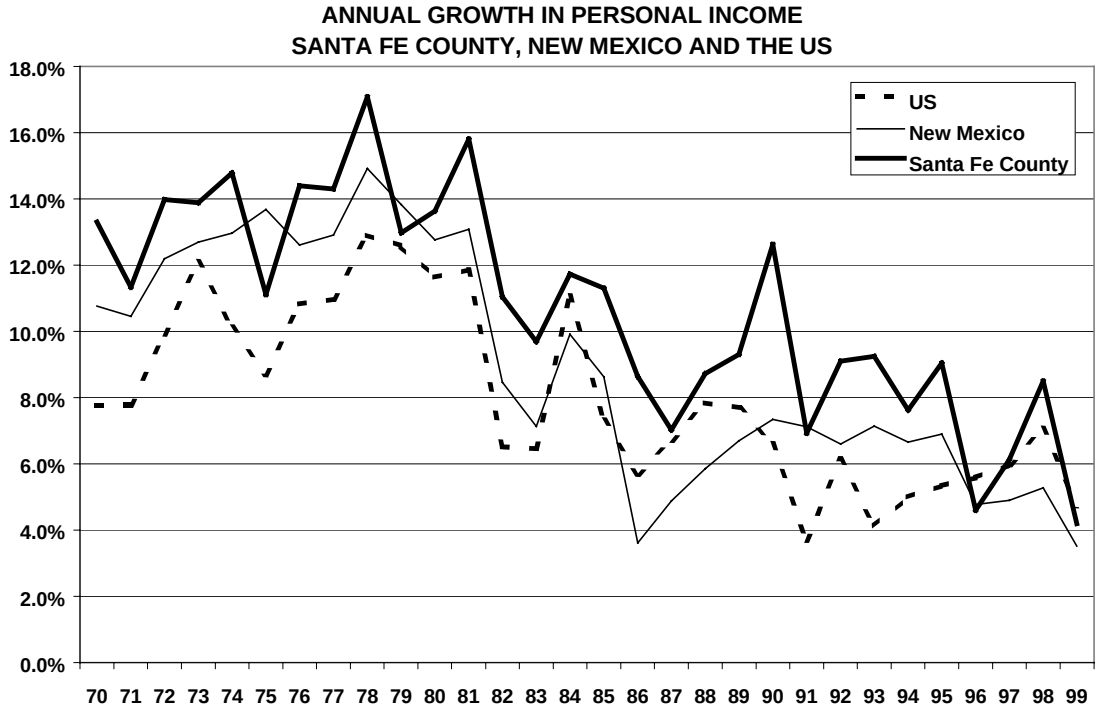
Agriculture, Forestry, and Fishing Sector and Mining Sector

Two relatively small sectors: the agriculture, forestry and fishing sector and the mining sector employ relatively fewer people in Santa Fe County than in either New Mexico or the US. While employment is generally shrinking in the mining industry, employment in agriculture, forestry and fishing has been growing rapidly. Between 1990 and 2000, the number of jobs advanced 126 percent in this sector to over 700, led by growth in agricultural services.

Personal Income

During the 1990's (through 1999, the latest year available), personal income in Santa Fe Country grew at a compound annual rate of 7.2 percent per year versus 5.8 percent in New Mexico as a whole and 5.3 percent for the US. Figure 1.10 tracks the long-term annual growth in personal income in the County, state, and US.

Figure 1.10



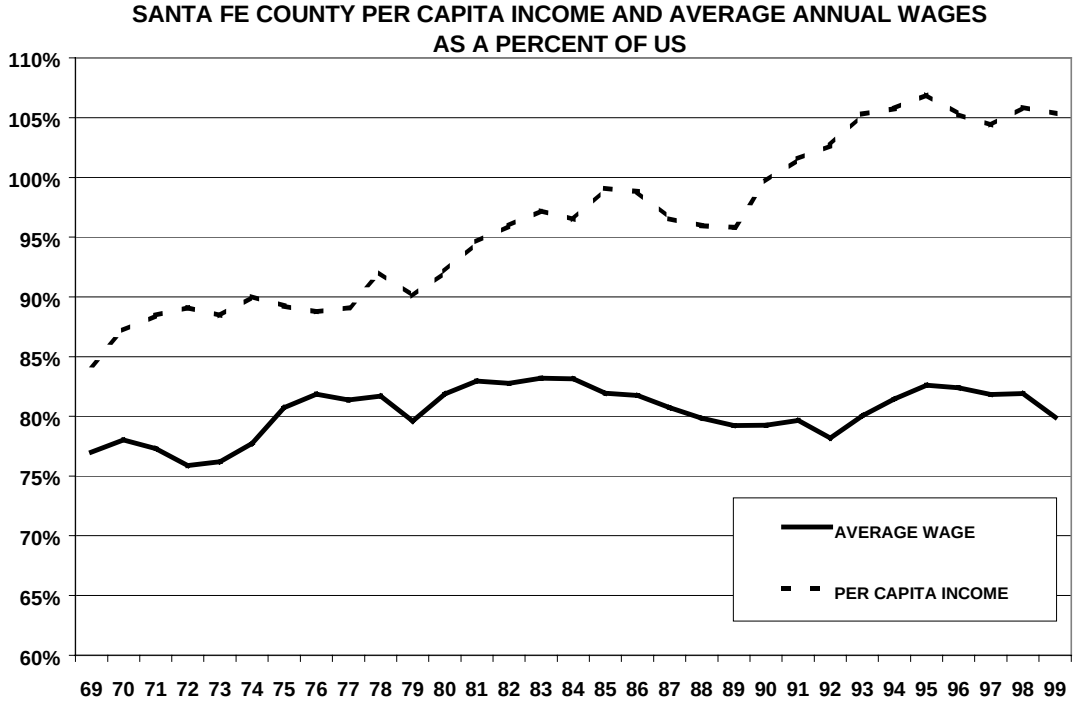
Note that income growth in Santa Fe County has typically exceeded income growth for New Mexico and for the US. Indeed, over the last three decades, income growth in Santa Fe County has averaged 1.2 times that in New Mexico and more than1.3 times that in the US.

Personal income has five major components: (1) wage and salary disbursements adjusted for residency; (2) other labor income; (3) farm and non-farm proprietors' income; (4) dividends interest and rent; and (5) transfer payments, the most important of which is social security. In the majority of communities, the most important source of personal income for residents are wage and salary disbursements. Nationwide in 1999, wage and salary income accounted for 58 percent of total personal income. In Santa Fe County, however, wage and salary comprised only 43 percent of total personal income. Twenty-seven percent of Santa Fe County income came from dividends, interest and rent – versus 19 percent for the US as a whole. Proprietors' income was

almost 10 percent of the County's personal income versus just under 9 percent nationwide. Transfer payments in 1999 were 9 percent of the County total. By comparison, transfer payments accounted for 13 percent of US personal income.

Completed before the Bureau of Economic Analysis release of revised per capita income estimates based on the 2000 Decennial Census data, income data in this report are not revised to the 2002 inter-censal population estimates. Santa Fe and Los Alamos are the only two counties in New Mexico with per capita income in excess of the US. Figure 1.11 presents the ratio of Santa Fe to US per capita income since 1969, showing an almost consistent improvement over time. The performance of Santa Fe per capita income is in marked contrast to that of average annual earnings, where Santa Fe County is still only about 80 percent of the national average.

Figure 1.11



Gross Receipts Tax Base

During the decade of the 1990's the City of Santa Fe's gross receipts tax base – its taxable gross receipts -- grew by 80 percent, which translates to a compound annual rate of 6.0 percent. Growth outside the City limits was somewhat faster. Taxable gross receipts for all of Santa Fe County increased 93 percent, for a compound annual rate of 6.8 percent.

Table 1.3 presents annual data on taxable gross receipts for major sectors for both the City and County. The table includes 2001 data, although this year is not included in the compound annual growth calculations. The bottom row in each table presents the year-over-year growth in total taxable gross receipts.

Table 1.3

TAXABLE GROSS RECEIPTS BY SECTOR: CITY OF SANTA FE AND SANTA FE COUNTY, 1990 - 2001

CITY OF SANTA FE

($ MILLIONS)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Compound Annual Growth 1990-2000
Construction	129.5	137.9	122.0	146.2	181.8	156.0	141.8	173.7	198.3	214.5	204.0	202.9	4.6%
Manufacturing	26.4	27.2	30.3	35.5	39.7	41.4	44.3	43.2	49.1	51.5	52.8	41.1	7.2%
Trans, Comm, Public Utilities	95.4	97.8	102.2	103.4	112.4	111.0	113.6	137.1	137.5	162.0	165.4	139.4	5.7%
Wholesale	31.2	34.0	30.9	35.8	38.7	38.4	38.0	41.9	46.3	53.5	64.9	68.8	7.6%
Retail	615.7	664.6	718.0	803.6	872.6	880.6	894.0	937.8	988.7	1,030.9	1,117.8	1,142.2	6.1%
Finance, Insur, Real Estate	63.5	58.9	63.4	76.8	84.5	69.9	67.5	73.9	77.9	77.4	84.8	84.1	2.9%
Services	383.9	409.5	444.1	502.7	540.7	571.8	584.1	616.7	650.9	686.2	728.5	738.5	6.6%
Other	7.8	9.6	11.6	12.6	12.9	12.0	9.9	11.9	13.0	13.7	14.3	14.2	6.3%
Total TGR	1,353.4	1,439.5	1,522.5	1,716.5	1,883.3	1,881.1	1,893.2	2,036.2	2,161.7	2,289.7	2,432.5	2,447.5	6.0%
% Growth y-o-y		6.4%	5.8%	12.7%	9.7%	-0.1%	0.6%	7.6%	6.2%	5.9%	6.2%	0.6%	

SANTA FE COUNTY

($ MILLIONS)

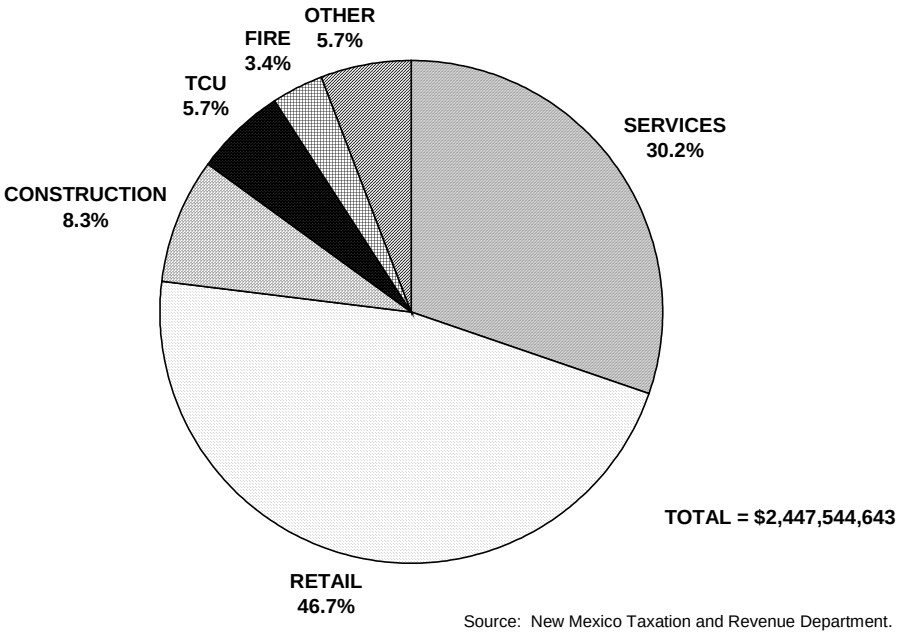
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Compound Annual Growth 1990-2000
Construction	217.9	230.8	236.3	264.8	330.3	310.2	297.4	333.4	378.0	401.9	441.6	423.5	7.3%
Manufacturing	31.8	33.8	38.0	43.2	48.4	49.9	53.0	52.5	59.1	63.0	69.0	68.0	8.1%
Trans, Comm, Public Utilities	128.6	132.9	139.4	140.7	153.6	154.9	154.7	187.4	188.6	216.6	224.9	200.7	5.8%
Wholesale	32.6	36.4	34.3	39.3	44.1	44.4	44.1	48.0	58.9	62.6	80.6	89.3	9.5%
Retail	659.9	713.0	765.5	860.8	959.6	978.4	1,006.3	1,040.6	1,106.7	1,146.9	1,242.5	1,289.2	6.5%
Finance, Insur, Real Estate	65.7	61.4	65.1	79.9	88.6	77.0	77.8	90.2	112.6	114.3	131.1	139.6	7.2%
Services	427.5	458.1	496.8	562.8	615.2	647.4	663.0	708.0	742.7	802.4	837.4	869.9	7.0%
Other	12.0	14.0	15.9	17.1	18.4	18.0	15.6	18.2	18.7	20.0	20.5	21.4	5.5%
Total TGR	1,575.9	1,680.5	1,791.5	2,008.6	2,258.2	2,280.2	2,311.8	2,478.2	2,665.4	2,827.6	3,047.6	3,101.5	6.8%
% Growth y-o-y		6.6%	6.6%	12.1%	12.4%	1.0%	1.4%	7.2%	7.6%	6.1%	7.8%	1.8%	

Source: New Mexico Taxation and Revenue Department.

Figure 1.12 shows the sectoral composition of the City's taxable gross receipts in 2001. Figure 1.13 gives a quick picture of the importance of different sectors in the growth in taxable gross receipts for the City of Santa Fe. Note the dominance of retail trade and services. Construction accounted for 8.3 percent of total taxable gross receipts in 2001, down from 9.6 percent in 1990. Over the decade, construction's share of total receipts varied from a low of 7.5 percent in 1996 to a high of 9.7 percent in 1994. A subsequent section of this report will explore the importance of growth and construction activity to the Santa Fe economy.

Figure 1.12

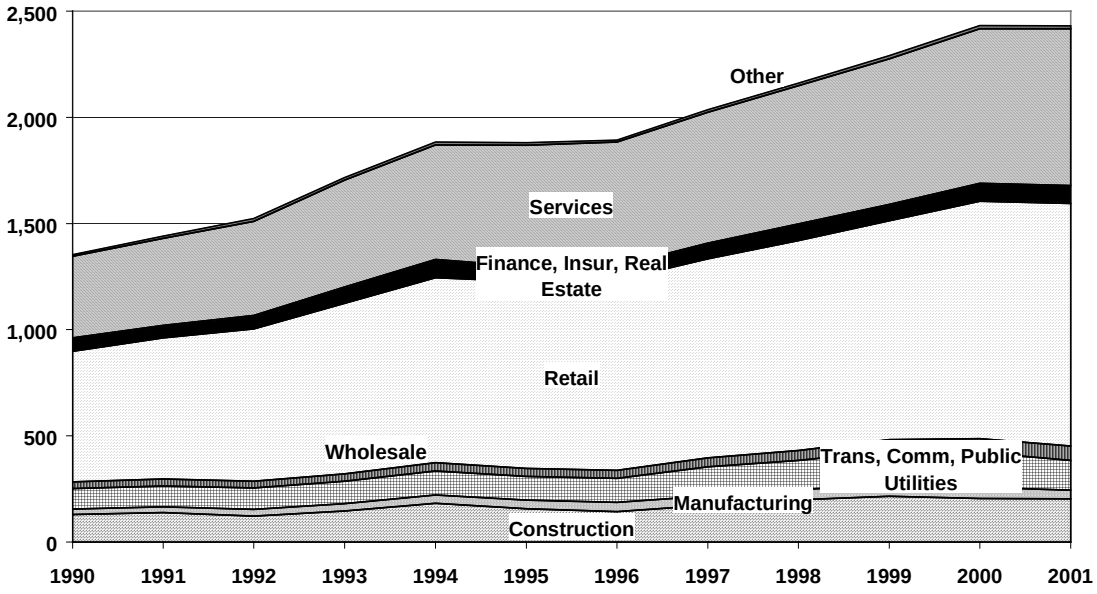
CITY OF SANTA FE: COMPOSITION OF TAXABLE GROSS RECEIPTS IN 2001



Source: New Mexico Taxation and Revenue Department.

Figure 1.13

CITY OF SANTA FE TAXABLE GROSS RECEIPTS BY SECTOR, 1990-2001
($000,000)

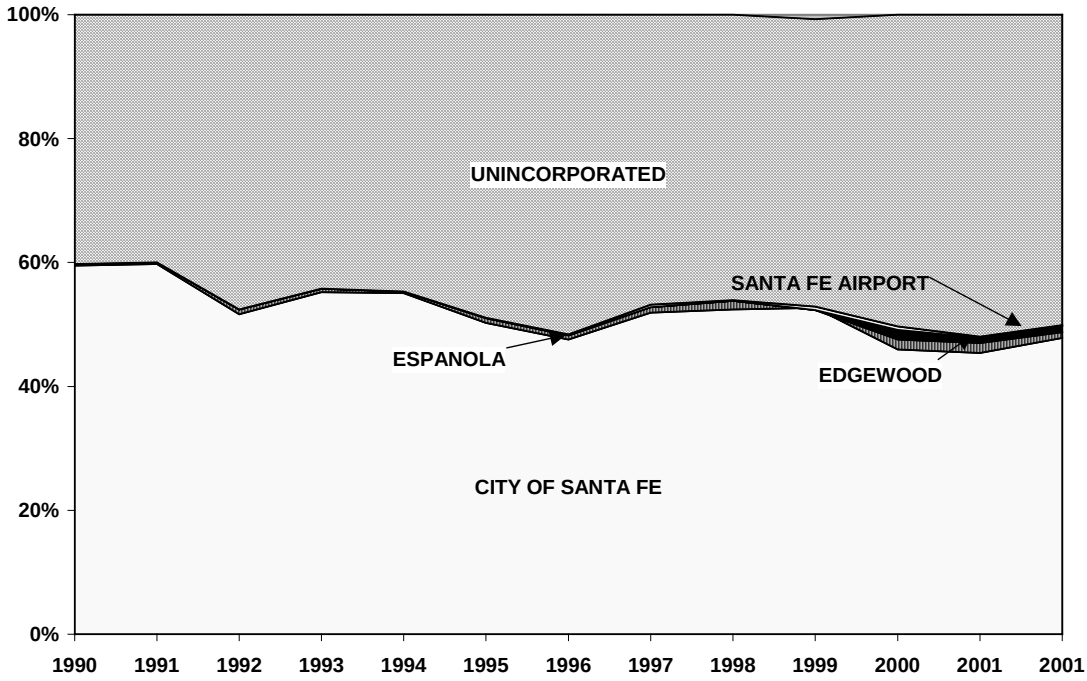


Source: New Mexico Taxation and Revenue Department.

In 1990, businesses within the City accounted for 85.9 percent of total County taxable gross receipts. By 2000, the City's share of the County total had slipped to 79.8 percent, and in 2001, a bad year for Santa Fe and other tourist destinations, the City's share was 78.4 percent. As has been noted earlier, during the 1990's much of the County's population growth occurred outside the City limits. Reflecting this trend, an increasing proportion of the construction activity was outside the City limits, with the bulk occurring in the unincorporated area, as shown in Figure 1.14.

Figure 1.14

CONSTRUCTION TAXABLE GROSS RECEIPTS IN SANTA FE COUNTY



There is an interesting footnote to the increasing construction activity outside the City limits. A change in state law early in the 1990's required that, like construction, taxable gross receipts on real estate commissions be reported for the location of the property sold. While many real estate companies may have offices within the City limits, a growing proportion of their sales are outside the City. The result has been a rather dramatic decline in the proportion of FIRE taxable gross receipts attributed to the City of Santa Fe – 60.2 percent in 2001, down from 96.7 percent in 1990.

While more and more people in the County live outside the City of Santa Fe, the City continues to dominate as the employment center. Its continued dominance of retail trade is evident in Figure 1.15. Pull factors based on population calculations also reflect this dominance. Retail taxable gross receipts per capita in the City of Santa Fe was 1.6 times that for Santa Fe County in 1990, indicating

that the City was pulling in sales from the larger area. By 2001, the pull factor had increased to 1.9.

Figure 1.16 looks at the City of Santa Fe's continued dominance of taxable gross receipts for the services sector. The City's taxable gross receipts per capita for this sector were 1.5 times those for the County in 1990. By 2001, the pull factor had increased to 1.8. Hotel receipts accounted for 17 percent of service sector taxable gross receipts in 1990 and were as high as 21 percent in 1993 and as low as 16 percent in 2001. There are no hotels in the other incorporated parts of Santa Fe County and the City's share of total county hotel receipts actually increased --from 89.5 percent in 1990 to 93.4 percent in 2000 and 2001.

Figure 1.15

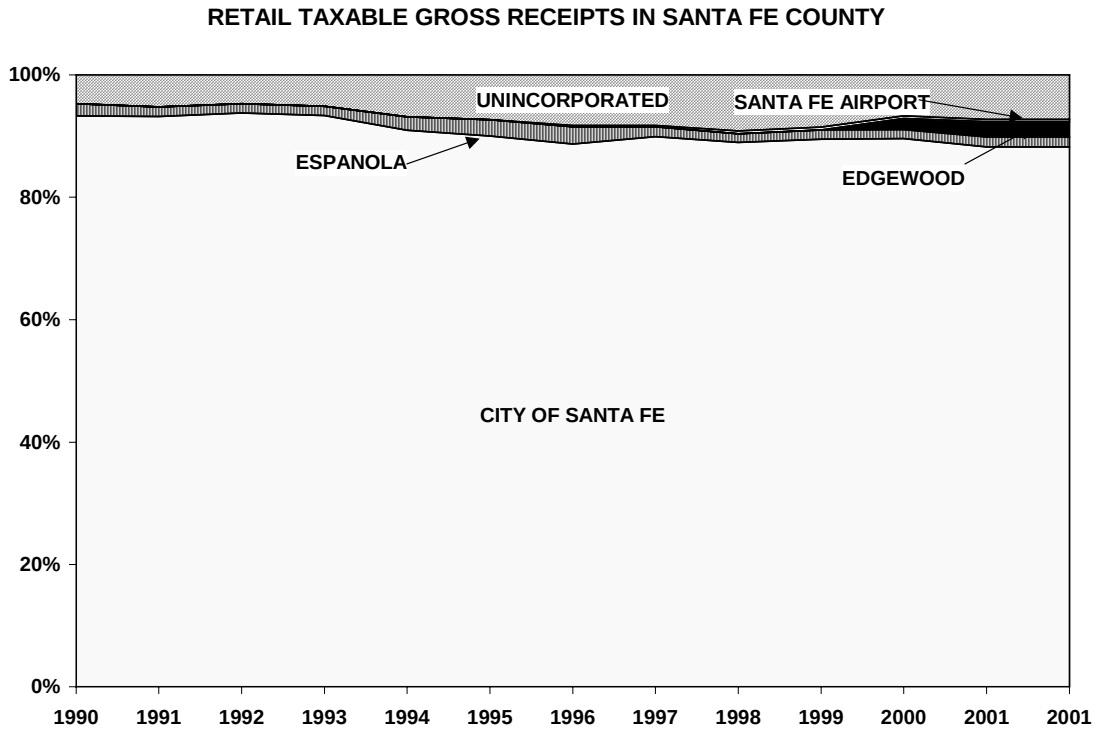
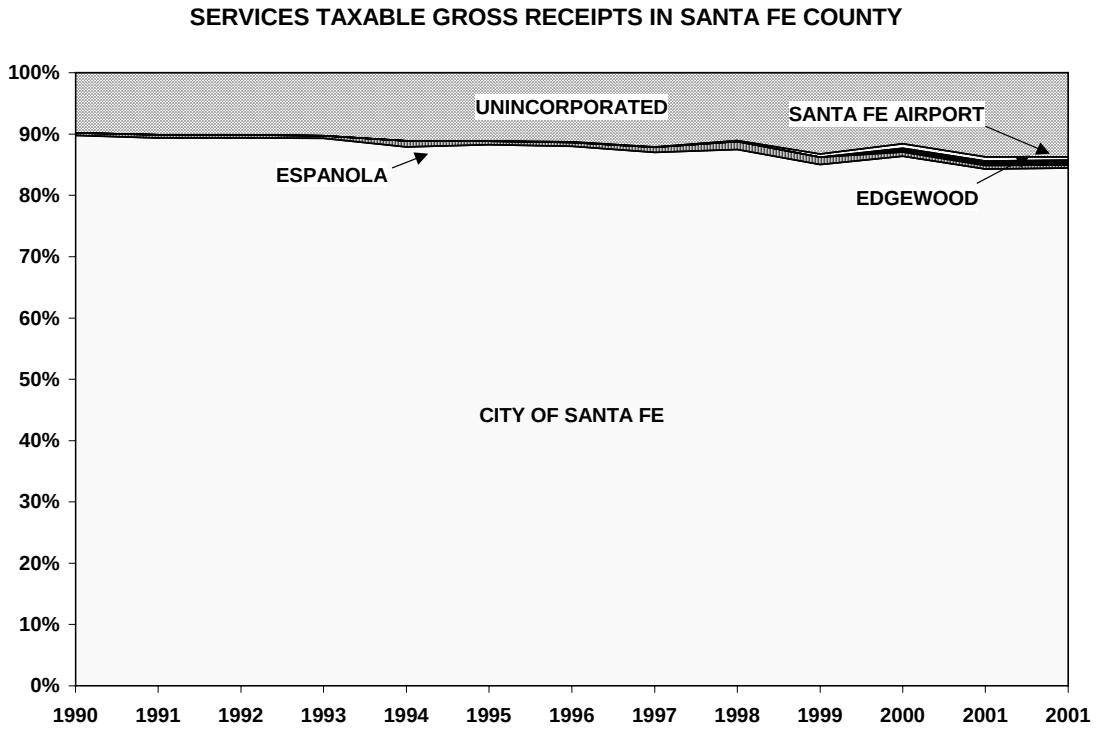


Figure 1.16



Housing

This section describes the characteristics of housing in the City of Santa Fe and surrounding areas. Building permits are used to describe the rate and characteristics of housing development in the City since 1977, Decennial Census data to analyze housing unit stock in the different geographies, and data on the sales of new and existing homes to gain an understanding of sales prices and sales rates by City and County sub-areas.

Housing Units

As shown in Table 1.4, change in housing units reflected the pattern of population change and increased by higher rates further away from the City. The number of housing units in the City increased by 5,852 (23.7%) compared to 2,196 (55.0%) in the Urban Area outside of the City. As a whole, the Urban Area experienced a 28.1 percent increase in housing units. The Central Region outside the Total Urban Area increased by 4,979 housing units (86.1%) and the Central Region as a whole by 37.8 percent.

The Central Region's portion of the County's housing units decreased from 83.1 percent in 1990 to 82.3 percent in 2000. The portion of the County's housing units in the Total Urban Area decreased from 69.2 percent to 63.6 percent, with the City's share decreasing while the share in Urban Area outside the City increased. The largest increase of housing unit shares was experienced by the

Central Region outside of the Total Urban Area, which increased by 4,979, from 13.9 percent to 18.7 percent.

Table 1.4

SANTA FE COUNTY AND SUB-AREA HOUSING UNITS, DISTRIBUTION AND CHANGE, 1980 - 2000

	Housing Units			
	1980	1990	2000	Change 1990-2000
New Mexico	507,744	632,058	780,579	148,521
Santa Fe County	28,363	41,464	57,701	16,237
Central Region	na	34,457	47,484	13,027
Total Urban Area	na	28,674	36,722	8,048
Santa Fe City	19,092	24,681	30,533	5,852
Urban Area (outside City)	na	3,993	6,189	2,196
Central Region (outside TUA)	na	5,783	10,762	4,979

	Housing Unit Percent Change		
	1980-90	1990-2000	1980-2000
New Mexico	24.5	23.5	53.7
Santa Fe County	46.2	39.2	103.4
Central Region	na	37.8	na
Total Urban Area	na	28.1	na
Santa Fe City	29.3	23.7	59.9
Urban Area (outside City)	na	55.0	na
Central Region (outside TUA)	na	86.1	na

	Percent of County Housing Units		
	1980	1990	2000
Santa Fe County	100.0	100.0	100.0
Central Region	na	83.1	82.3
Total Urban Area	na	69.2	63.6
Santa Fe City	67.3	59.5	52.9
Urban Area (outside City)	na	9.6	10.7
Central Region (outside TUA)	na	13.9	18.7

na - not available.

Source: U.S. Bureau of the Census, Decennial Censuses.

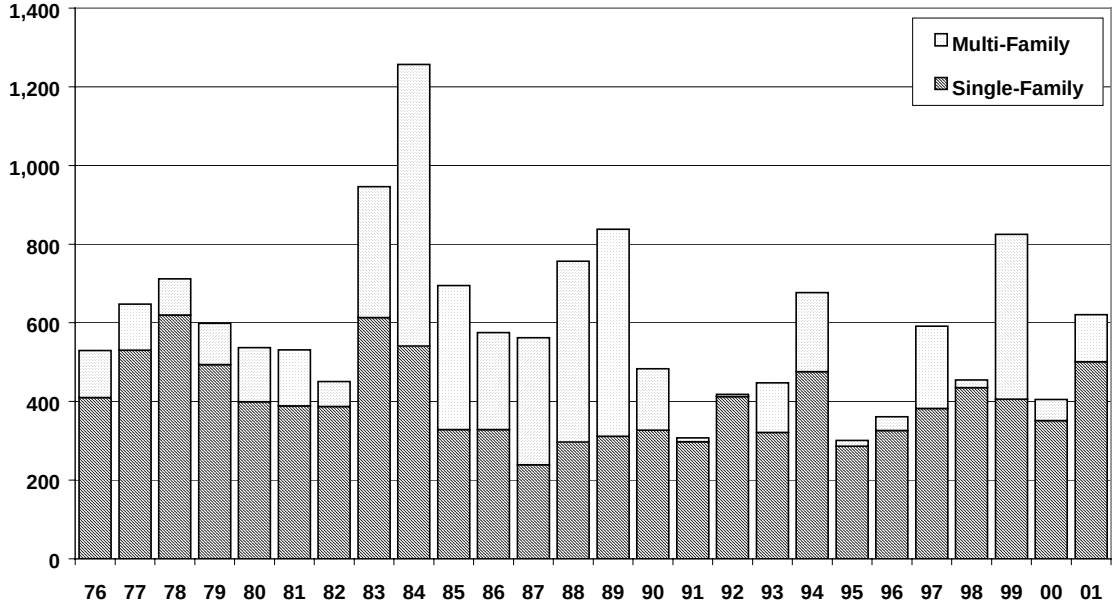
Building Permits

Figure 1.17 clearly shows the erratic nature of the issuance of building permits in the City of Santa Fe. While there have been large increases and decreases in the number of permits issued, the number of permits issued for single-family units in 2001 was only 61 greater than in 1976, while only one more multi-family unit was permitted in 2001 than in 1976. The number of total permits issued annually ranged from a low of 301 in 1996 to a high of 1,257 in 1987, with an annual average of 597. Single-family detached permits issued ranged from 239

in 1987 to 620 in 1978, averaging 400 annually. Multi-family units permits issued annually ranged from 6 in 1992 to 716 in 1984. Of the total multi-family permits issued in the time period, 58.1 percent were issued between 1983 and 1989.

Figure 1.17

CITY OF SANTA FE: SINGLE AND MULTI-FAMILY UNITS PERMITTED 1976 - 2001

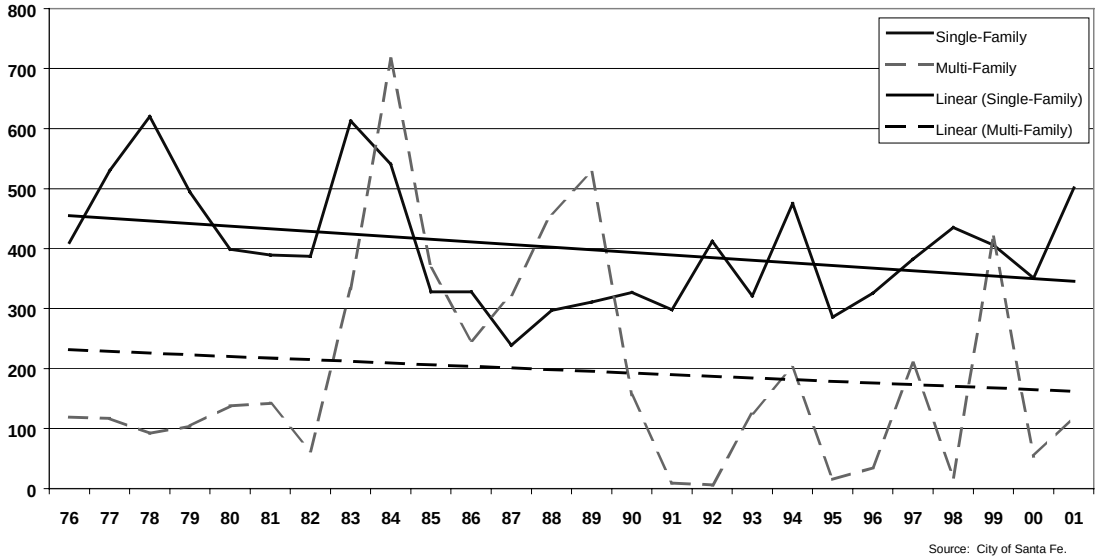


Data: City of Santa Fe.

The trend line in Figure 1.18 shows that the number of both single-family and multi-family units permitted has been decreasing during the time period. Based on a linear trend, single-family permits have decreased from roughly 450 units annually in 1976 to slightly less than 350 in 2001, and multi-family units from roughly 225 in 1976 to about 175 in 2001. On average, 687 permits were issued annually between 1982 and 1991 compared to 510 between 1992 and 2001.

Figure 1.18

CITY OF SANTA FE: SINGLE AND MULTI-FAMILY UNITS PERMITTED TRENDS, 1977 - 2001



Source: City of Santa Fe.

Because of the erratic nature of permit issuance, Table 1.5 presents units permitted in five-year totals from 1977 to 2001. In this time period 14,994 units were permitted, two-thirds of which were single-family and one-third multi-family. The fewest units permitted (2,204) was between 1992 and 96 (14.7% of the total permits issued in the time period) while 1982 – 86 had the largest amount with 3,923 (26.2%). The most recent period, 1997 – 2001 had 2,896 permits issued, or 19.3 percent of the total, which is an increase from the previous five-year period but only the second smallest increase of the five year periods.

Table 1.5

SINGLE AND MULTI-FAMILY UNITS PERMITTED IN FIVE-YEAR INTERVALS: CITY OF SANTA FE, 1977 - 2001

	1977 - 81	1982 - 86	1987 - 91	1992 - 96	997 - 2001	1977 - 2001	
Permits	Number	Number	Number	Number	Number	Number	Percent
Total	3,025	3,923	2,946	2,204	2,896	14,994	100.0
Single-Family	2,432	2,197	1,472	1,820	2,075	9,996	66.7
Multi-Family	593	1,726	1,474	384	821	4,998	33.3
	Percent of Total Permits Issued, 1977 - 2001						
	Percent	Percent	Percent	Percent	Percent	Percent	
Total	20.2	26.2	19.6	14.7	19.3	100.0	
Single-Family	24.3	22.0	14.7	18.2	20.8	100.0	
Multi-Family	11.9	34.5	29.5	7.7	16.4	100.0	

Source: City of Santa Fe.

While the data are available for only a short time period, the value per-single-family residential unit (unadjusted for inflation) steadily increased between 1997 and 2000, from $86,000 to $134,000, an average annual increase of 16.5 percent (Table 1.6). The average single-family permit value dropped in 2001, when 501 permits - the largest number of the five-year period – were issued. Value per-multi-family unit, with the exception of 1998 (which appears to be an anomaly or due to faulty data) has been declining since 1999 when it reached $47,000 to its 2001 level of $39,000.

Table 1.6
CITY OF SANTA FE RESIDENTIAL BUILDING PERMITS AND VALUES 1997 - 2001

Total Value ($000)	1997	1998	1999	2000	2001	Annual Average
Total Residential	41,544	47,648	63,970	49,152	69,763	54,416
Single-famliy	32,702	42,510	44,301	46,752	65,098	46,272
Multi-family	8,843	5,138	19,670	2,400	4,665	8,143
Permits						
Total Residential	591	454	825	402	621	579
Single-family (units	382	435	406	348	501	414
Multi-family (units)	209	19	419	54	120	164
Value per Unit ($000)						
Total Residential	70	105	78	122	112	94
Single-famliy	86	98	109	134	130	112
Multi-family	42	270	47	44	39	50

Source: City of Santa Fe.

Home Sales and Prices

Home sales and median values are examined using MLS (multiple listing services) data compiled by the Santa Fe Association of Realtors (SFAR). These data are available from 1995 to 2001 and cover new and existing single-family detached homes sold and reported to the SFAR. Data are examined for the City of Santa Fe and areas of Santa Fe County surrounding the City and do not include the northernmost and southernmost portions of the County.

From 1995 through 2001, 8,418 homes were sold in the Santa Fe Area. Home sales grew by an overall rate of 60.3 percent from 894 units in 1995 to 1,433 units in 2001. Sales in the City accounted for 58.3 percent of total sales in the area while sales in the County accounted for the remaining 41.7 percent. In year-over-year total sales, 1998 had the highest increase with 33.3 percent.

Table 1.7 shows the distribution of total area sales in the time period. Fifty-nine percent (2,091) of the total 3,514 sales in the County were in the southeast portion of the County. Roughly three-quarters of these sales were in the Eldorado subdivision. The lowest number of sales, 607 homes (17.3%) occurred

Table 1.7
SINGLE-FAMILY DETACHED HOME SALES (NEW AND EXISTING): SANTA FE AREA[1], 1995 - 2001

	Number of Units Sold[2]							
	1995	1996	1997	1998	1999	2000	2001	Total
Santa Fe Area:	894	927	1,039	1,385	1,371	1,369	1,433	8,418
City of Santa Fe	515	567	625	830	780	826	761	4,904
NE City	88	99	122	149	143	152	138	891
NW City	43	51	42	57	64	64	63	384
SE City	96	126	148	209	184	169	192	1,124
SW City	288	291	313	415	389	441	368	2,505
County (outside City)	379	360	414	555	591	543	672	3,514
North County	73	72	103	134	143	159	132	816
SE County	239	217	241	342	353	315	384	2,091
Eldorado[3]	188	172	192	260	269	246	258	1,585
SW County	67	71	70	79	95	69	156	607
City and County Distribution of Sales:								
City of Santa Fe	57.6%	61.2%	60.2%	59.9%	56.9%	60.3%	53.1%	58.3%
Santa Fe County	42.4%	38.8%	39.8%	40.1%	43.1%	39.7%	46.9%	41.7%

1 - The Santa Fe Area does not include the entire county, excluding the northern- and southernmost portions.

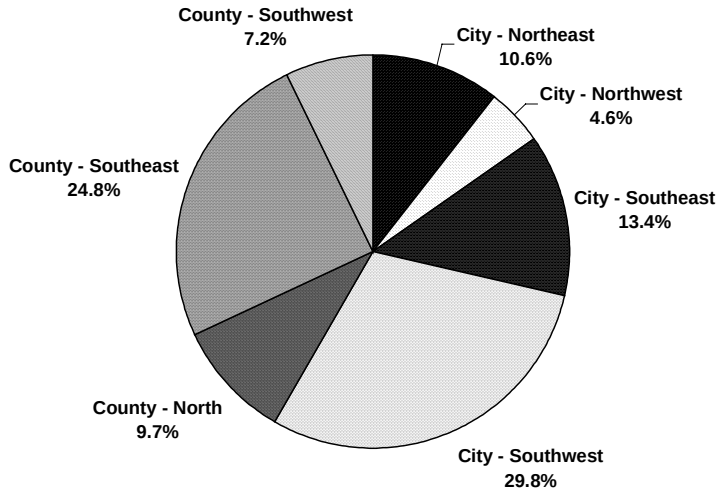
2 - Does not include condos/townhomes, duplexes/multi-plexes or mobile homes.

3 - Eldorado sales included in southeast county total.

Source: Santa Fe Association of Realtors.

Figure 1.19

Santa Fe Area Single-Family Detached Home Sales by Area, 1995 - 2001[1]



1 - does not include all of Santa Fe County.
Source: Santa Fe Association of Realtors.

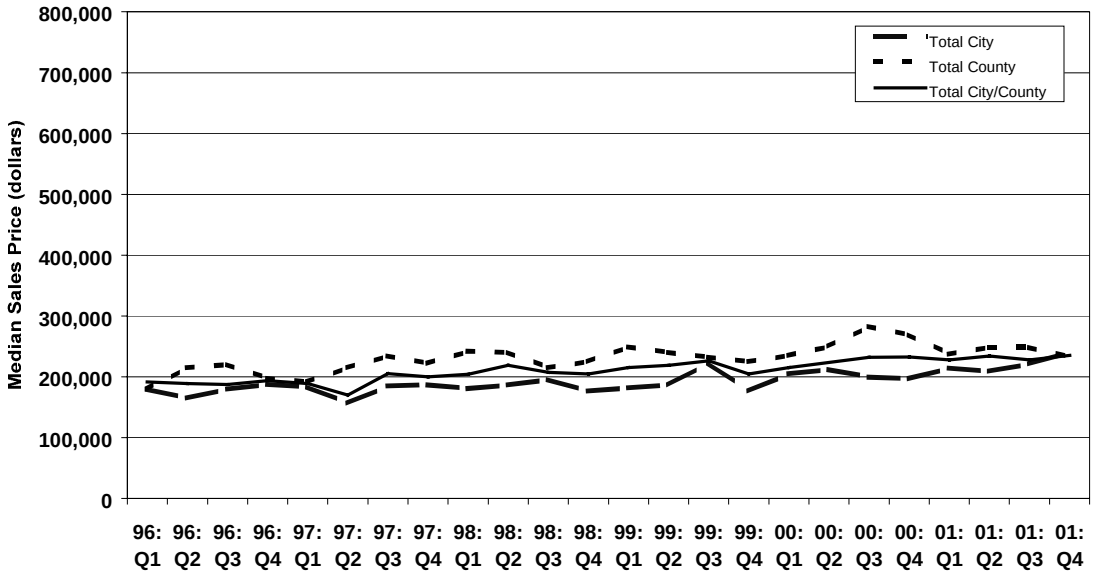
in the southwest area of the County. In the City, most sales occurred in the southwest area of the City and the lowest in the northwest part of the city. Sales in the southwest area accounted for 2,505 (51.1%) of the total 4,904 sales in the City, while the northwest area accounted for 384 (7.8%). Figure 1.19 plots the sales by area between 1995 and 2001.

Between 1996 and 2002 the median sales prices for existing and new, single-family detached homes ranged from a high of $697,500 in the north area of the County (during the third quarter of 1996) and a low of $127,116 in the southwest part of the City. Overall, the median sales price of a home in the total Santa Fe area over the 6-year period fell between the range of $170,200 and $235,000. Median sales prices for homes in the City and County are presented in Figure 1.20, and for the City in 1.21, and the County in 1.22.

The area with the highest median price was the north part of the Santa Fe area, where the median price during the 6-year period fell between $332,500 and $697,500. The lowest median price was found in the southwest region of the City of Santa Fe, where the median price during the 6-year period fell between the range of $127,116 and $177,000. The lowest total median price for homes in the city/county area occurred during the second quarter of 1997 with a median price of $170,000. The fourth quarter of 2002 experienced the highest total median price in the city/county area with a median price of $235,000.

Figure 1.20

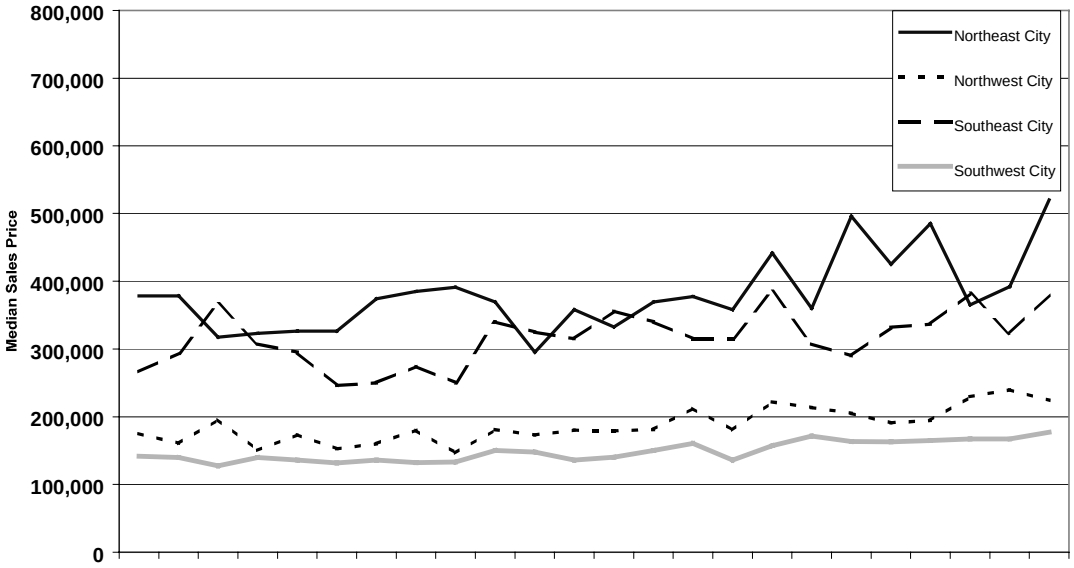
SANTA FE CITY AND COUNTY SINGLE-FAMILY DETACHED HOME MEDIAN SALES PRICE, 1996 - 2001[1]



1 - does not include all of Santa Fe County.
Source: Santa Fe Association of Realtors.

Figure 1.21

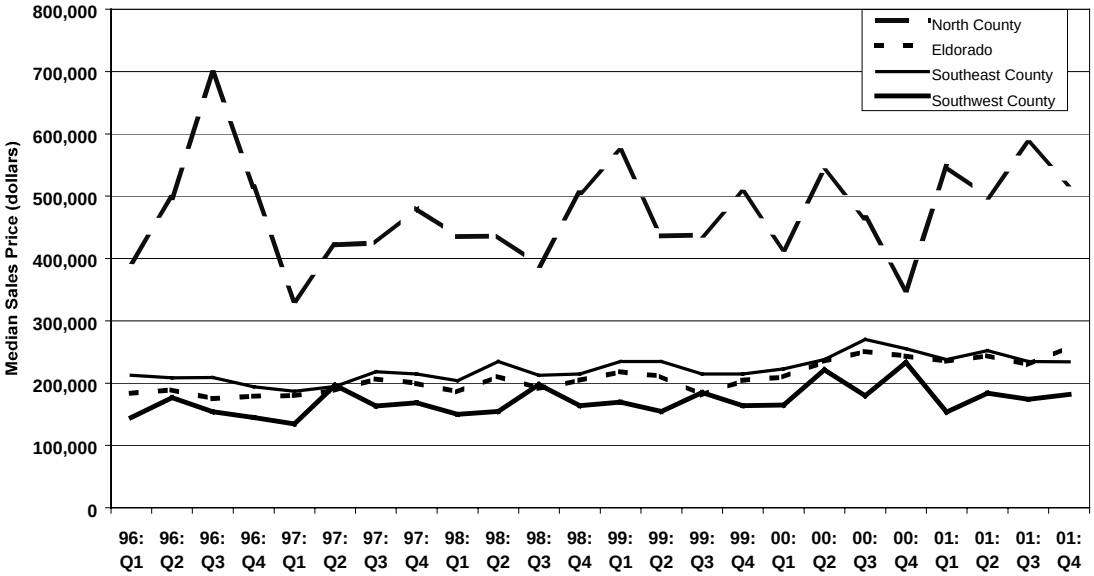
CITY OF SANTA FE SINGLE-FAMILY DETACHED HOMES: MEDIAN SALES PRICE, 1996 - 2001



Source: Santa Fe Association of Realtors, 2002.

Figure 1.22

SANTA FE COUNTY SINGLE-FAMILY DETACHED HOME MEDIAN SALES PRICE, 1996 - 2001[1]



1 - does not include all of Santa Fe County.
Source: Santa Fe Association of Realtors.

Regional Growth Potential

The capacity of the surrounding area to accommodate housing unit and population growth was assessed by using buildout information from the City of Santa Fe's General Plan (1999) and the City's Planning and Land Use Department's March 2002 Growth Projections. The General Plan identified a potential 2020 buildout of housing units of 15,500 and population of 33,400 in the Urban Area.

An alternative and updated inventory of developable area is presented in the 2020 Growth Projections, prepared by the City of Santa Fe Planning Division's Planning and Land Use Department Santa Fe. This report distributed projected population to land in- and outside of the Urban Area based on existing and approved developments and zoning. The allocation of housing units to Urban Area sub-areas are presented in Table 1.8, and project a total of 13,300 housing units. These housing units were populated using persons per occupied housing unit from the 2000 Decennial Census for the Urban Area resulting in a population of 30,989 at buildout. The large majority of the units are in Tierra Contenta and Greater Agua Fria. Population projections for these housing units are based on 2.33 persons per housing unit, an estimate based on 1990 and 2000 Decennial Census Data for the Urban Area.

Table 1.8
POTENTIAL DEVELOPMENT BY SUB-AREAS:
OUTSIDE THE URBAN AREA, 2002 - 2020

Area:	Additional Housing Units[1]	Population at Buildout[2]
Tesuque	200	494
Camino La Tierra N.	200	494
Santa F Center	100	247
West of NM 599	700	1,729
Las Campanas	1,000	2,470
La Cienege / Cinguilla	600	1,482
I-25 & NM 14	200	494
Com. College Dist.	4,000	9,880
San Marcos	200	494
Seton Village	200	494
Eldorado	400	988
Canoncito (SE I-25)	200	494
	8,000	19,760

1 - City of Santa Fe Planning and Land Use Department, Santa Fe 2020 Growth Projections (revised), March 2002. Projections are based on the availability of sufficient water and financial resources.

2 - Based on 2000 Decennial Census persons per occupied housing unit in the Central Region outside of the Urban Area.

Source: City of Santa Fe; Bureau of Business and Economic Research.

As was shown, the population in the Region and outside of the Urban Area grew from 14,910 to 25,056 (68.0%) between 1990 and 2000. The ability of this land to continue to accommodate additional housing units and population growth is impacted by a number of factors. Water is clearly an important factor that has the potential to impact any aspect of growth in the Central Region, as well as New Mexico as a whole. To protect the character of traditional villages, such as La Cienega and Tesuque, the County is limiting new development to a scale consistent with historic development patterns. The subdivision of land outside of the urban area and the resulting use of domestic well and septic systems may impact the groundwater supplies of existing residents. The development and maintenance of infrastructure, such as roads, and the ability of the County to meet the existing – and potentially increased – demand resulting from the development of housing is a serious consideration.

Table 1.9 shows housing unit projections in areas outside the Urban Area. Housing unit projection for the area outside of the Urban Area show a potential 8,000 units resulting in a population of 19,760. Of the total 8,000 additional units projected, 4,000 are in the Community College District. Population projections for these housing units are based on 2.47 persons per housing unit based on person per occupied housing unit data from 1990 and 2000 Decennial Census Data for areas outside of the Urban Area.

Table 1.9

POTENTIAL DEVELOPMENT BY SUB-AREAS: THE URBAN AREA, 2002 - 2020

Area:	Additional Housing Units[1]	Population at Buildout[2]
Downtown Core	24	56
City Infill	1,776	4,138
Tierra Contenta	4,500	10,485
Villa Linda Mall South	2,000	4,660
Greater Agua Fria	3,000	6,990
Santa Fe Estates	1,100	2,563
Tano (Monte Sereno)	200	466
Foothills	200	466
South of Tierra Contenta	500	1,165
	13,300	30,989

1 - City of Santa Fe Planning and Land Use Department, Santa Fe 2020 Growth Projections (revised), March 2002. Projections are based on the availability of sufficient water and financial resources.

2 - Based on 2000 Decennial Census persons per occupied housing unit in the Urban Area.

Source: City of Santa Fe; Bureau of Business and Economic Research.

GROWTH SCENARIOS

This section summarizes the analysis of the demographic and economic impacts of the four growth scenarios. The analysis of the following scenarios:

> Scenario 1, Market Growth-No Water Shortage, establishes baseline population and employment projections and related housing demand and commercial space requirements, and City revenue estimates.
>
> Scenario 2, Market Growth-Water Shortage, assumes baseline conditions until a serious water shortage develops in 2004 with a 12- month building moratorium for 2005.
>
> Scenario 3, Water Budget-Moderate Limits, sets annual limits on new hook-ups to the City's water system at a maximum of 650 housing units, 450,000 square feet of commercial (non-residential) floor area and 75 new hotel-motel rooms. There is an exemption for affordable housing.
>
> Scenario 4, Water Budget-Tighter Limits, sets annual limits on new City water system hook-ups at a maximum of 360, a square feet of commercial (non-residential) floor area limit of 225,000, and no new hotel-motel rooms through 2005 and 2010. There is an exemption for affordable housing.

Market Growth-No Water Shortage

This section presents Scenario 1, Market Growth-No Water Shortage, and establishes the baseline population projections (Table 2.1), housing demand estimates (Table 2.2). Baseline economic projections are also presented, including: employment projections (Table 2.3 and 2.4); commercial square feet projections (Table 2.5 and 2.6); gross receipts (Table 2.7); and, taxable value of buildings permitted (Table 2.8).

Population and Housing Units

Population projections by geographic area (the City of Santa Fe, the total Urban Area and the Urban Area outside the City, and the Central Region) were derived from BBER's projections for Santa Fe County. Based on 1990 and 2000 Decennial Census data, the distribution of the County's population to the geographic areas was projected for 2010. Distribution ratios for the geographic areas were then interpolated for the individual years between 2000 and 2010 and applied to the annual projections for the County.

Between 2000 and 2010 the population of the Central Region is projected to increase by 23,245 persons (22.1%). Slightly less than half of the population increase is projected for the second half of the decade. Urban Area population is projected to increase to 89,734 in 2010, an increase of 12.1 percent. Largely due to projected population changes in the City of Santa Fe - which are a

continuation of the City's population trends between 1980 and 2000 – the Urban Area's rate of growth decreases between 2005 and 2010. Population in the portion of the Central Region outside of the Urban Area is projected to grow by 13,567 persons (53.8%) by 2010 when it reaches a population of 38,784.

Table 2.1

POPULATION PROJECTIONS AND CHANGE

SCENARIO 1: MARKET GROWTH - NO WATER SHORTAGE, 2000 - 2010

	Population[1]		
Area:	2000	2005	2010
Central Region	105,272	116,964	128,518
Total Urban Area	80,056	85,327	89,734
Central Region (outside of TUA)	25,217	31,637	38,784
	Change		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	11,692	11,554	23,245
Total Urban Area	5,272	4,407	9,679
Central Region (outside of TUA)	6,420	7,147	13,567
	Percent Change		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	11.1	9.9	22.1
Total Urban Area	6.6	5.2	12.1
Central Region (outside of TUA)	25.5	22.6	53.8

1 - midyear (July 1) population.

Bureau of Business and Economic Research, University of New Mexico.

Estimated housing unit demand equals the number of units needed to house the projected population change and was calculated using persons per occupied housing units from the 2000 Decennial Census. Baseline housing unit projections for the City of Santa Fe, the Urban Area outside of the City and for the Central Region outside of the Urban Area were calculated and then summed for larger area estimates. For example, housing unit demand in the City and the Urban Area outside of the City were summed for Urban Area. Demand for seasonal, recreational and vacation housing was added to the population driven demand, resulting in total housing unit demand.

As shown in Table 2.2, an additional 9,186 housing units are needed to accommodate the Central Region's population increase of 23,245 persons and associated recreational, seasonal and vacation use. Of this total, 3,478 housing units are needed estimated in the Urban Area and 5,708 units in the remaining Central Region. At 1,974 units, Urban Area demand will be higher in the first half of the decade than in the second, which is estimated at 1,504 units.

Table 2.2

HOUSING UNIT PROJECTIONS AND DEMAND, 2000 - 2010

SCENARIO 1: MARKET GROWTH-NO WATER SHORTAGE

	Total Housing Unit Demand		
Area:	2000	2005	2010
Central Region	46,486	51,161	55,672
Total Urban Area	35,878	37,851	39,356
Central Region (outside of TUA)	10,609	13,310	16,316

	Additional Housing Unit Demand		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	4,675	4,511	9,186
Total Urban Area	1,974	1,504	3,478
Central Region (outside of TUA)	2,701	3,007	5,708

	Percent Change in Housing Unit Demand		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	10.1	8.8	19.8
Total Urban Area	5.5	4.0	9.7
Central Region (outside of TUA)	25.5	22.6	53.8

1 - midyear (July 1) population.

Bureau of Business and Economic Research, University of New Mexico.

Employment Estimates and Projections

Tables 2.3 and 2.4 present baseline non-agricultural employment estimates and employment projections for the County and for the City of Santa Fe. Figures are presented for both a slower growth scenario and for a trend scenario. The appendix includes details on the methodology used in developing the employment estimates and projections.

Under the Slower Growth scenario, total Santa Fe County non-agricultural employment grows by 11 thousand between 2000 and 2010, reflecting a compound annual rate of 1.7 percent. Employment within the existing municipal boundaries grows somewhat more slowly, at a compound annual rate of 1.15 percent, with the result that the City's share of total employment decreases to 81 percent. The first few years of this slower growth scenario are consistent with BBER's March 2002 forecast for the Santa Fe MSA using the FOR-UNM model.

Over the past 4 decades, Santa Fe County growth has averaged 1.36 times the growth for the state of New Mexico. The trend scenario assumes a continuation of this historical relationship. Under this scenario, employment in Santa Fe County increases by almost 14 thousand over the decade, achieving a compound annual growth of 2.2 percent. Employment growth for the City of Santa Fe is roughly 8,500, for a compound annual rate of 1.6 percent.

Table 2.3
EMPLOYMENT PROJECTIONS
SCENARIO 1: MARKET GROWTH -- NO WATER SHORTAGE
SLOWER GROWTH

SANTA FE COUNTY

Nonagricultural Wage and Salary Employment by Sector

	Mfg	Const & Mining	TPU	Whole-sale	Retail	FIRE	Services	Govt	Total	Year-over-year Growth
1999	1,698	4,055	1,149	1,289	13,021	2,971	17,427	14,936	56,546	
2000	1,695	4,150	1,125	1,214	13,395	2,986	17,590	15,445	57,600	1.86%
2001	1,653	4,205	1,075	1,214	13,106	3,061	18,000	15,480	57,794	0.34%
2002	1,650	4,306	1,080	1,224	13,446	3,123	18,431	15,282	58,541	1.29%
2003	1,667	4,409	1,086	1,234	13,778	3,188	18,989	15,413	59,763	2.09%
2004	1,683	4,514	1,091	1,243	14,090	3,272	19,666	15,774	61,334	2.63%
2005	1,700	4,623	1,097	1,253	14,377	3,352	20,278	16,147	62,826	2.43%
2006	1,700	4,734	1,102	1,263	14,710	3,409	20,858	16,430	64,206	2.20%
2007	1,700	4,848	1,108	1,273	14,936	3,451	21,251	16,592	65,159	1.48%
2008	1,700	4,964	1,113	1,284	15,186	3,497	21,677	16,782	66,204	1.60%
2009	1,700	5,084	1,119	1,294	15,434	3,544	22,102	16,964	67,240	1.57%
2010	1,700	5,207	1,124	1,304	15,716	3,597	22,575	17,192	68,416	1.75%
Compound Annual Growth	0.03%	2.29%	-0.01%	0.72%	1.61%	1.88%	2.53%	1.08%	1.74%	

CITY OF SANTA FE

Nonagricultural Wage and Salary Employment by Sector

	Mfg	Const & Mining	TPU	Whole-sale	Retail	FIRE	Services	Govt	Total	Annual Growth
1999	1,366	2,101	1,034	1,235	12,348	2,822	14,902	12,678	48,485	
2000	1,364	1,835	1,009	1,161	12,639	2,814	15,303	13,061	49,187	1.45%
2001	1,330	1,928	961	1,151	12,305	2,862	15,282	13,067	48,887	-0.61%
2002	1,327	2,104	963	1,155	12,562	2,897	15,556	12,862	49,424	1.10%
2003	1,340	2,106	964	1,158	12,809	2,933	15,932	12,934	50,177	1.52%
2004	1,354	2,108	966	1,162	13,036	2,986	16,402	13,197	51,209	2.06%
2005	1,367	2,108	967	1,166	13,236	3,033	16,810	13,469	52,157	1.85%
2006	1,367	2,108	969	1,169	13,478	3,059	17,187	13,664	53,001	1.62%
2007	1,367	2,106	970	1,173	13,619	3,071	17,405	13,757	53,469	0.88%
2008	1,367	2,104	972	1,177	13,781	3,087	17,645	13,872	54,005	1.00%
2009	1,367	2,100	973	1,180	13,939	3,101	17,881	13,981	54,522	0.96%
2010	1,367	2,095	975	1,184	14,127	3,120	18,151	14,126	55,145	1.14%
Compound Annual Growth	0.03%	1.33%	-0.35%	0.20%	1.12%	1.04%	1.72%	0.79%	1.15%	
City Share:										
in 2000	80%	44%	90%	96%	94%	94%	87%	85%	85%	
in 2010	80%	40%	87%	91%	90%	87%	80%	82%	81%	

Bureau of Business and Economic Research, University of New Mexico.

Table 2.4
EMPLOYMENT PROJECTIONS
SCENARIO 1: MARKET GROWTH -- NO WATER SHORTAGE
TREND GROWTH

SANTA FE COUNTY

Nonagricultural Wage and Salary Employment by Sector

	Mfg	Const & Mining	TPU	Whole-sale	Retail	FIRE	Services	Govt	Total	Year-over-year Growth
1999	1,698	4,055	1,149	1,289	13,021	2,971	17,427	14,936	56,546	
2000	1,695	4,150	1,125	1,214	13,395	2,986	17,590	15,445	57,600	1.86%
2001	1,653	4,205	1,075	1,214	13,086	3,200	18,100	15,480	58,013	0.72%
2002	1,650	4,306	1,080	1,224	13,425	3,130	18,472	15,304	58,591	1.00%
2003	1,667	4,409	1,086	1,234	13,827	3,214	19,141	15,579	60,156	2.67%
2004	1,683	4,514	1,091	1,243	14,263	3,322	19,968	16,096	62,182	3.37%
2005	1,700	4,623	1,097	1,253	14,673	3,426	20,777	16,570	64,119	3.11%
2006	1,717	4,734	1,102	1,263	15,046	3,523	21,555	16,983	65,923	2.81%
2007	1,734	4,848	1,108	1,273	15,279	3,590	22,160	17,181	67,173	1.90%
2008	1,752	4,964	1,113	1,284	15,541	3,664	22,815	17,418	68,550	2.05%
2009	1,769	5,084	1,119	1,294	15,798	3,737	23,477	17,645	69,923	2.00%
2010	1,787	5,207	1,124	1,304	16,100	3,821	24,211	17,933	71,487	2.24%
Compound Annual Growth	0.53%	2.29%	-0.01%	0.72%	1.86%	2.50%	3.25%	1.51%	2.18%	

CITY OF SANTA FE

Nonagricultural Wage and Salary Employment by Sector

	Mfg	Const & Mining	TPU	Whole-sale	Retail	FIRE	Services	Govt	Total	Annual Growth
1999	1,366	2,101	1,034	1,235	12,348	2,822	14,902	12,678	48,485	
2000	1,364	1,835	1,009	1,161	12,639	2,814	15,303	13,061	49,187	1.45%
2001	1,330	1,928	961	1,151	12,287	2,992	15,367	13,067	49,083	-0.21%
2002	1,327	2,104	963	1,155	12,543	2,903	15,590	12,881	49,465	0.78%
2003	1,340	2,106	964	1,158	12,855	2,957	16,060	13,072	50,513	2.12%
2004	1,354	2,037	966	1,162	12,855	3,032	16,220	13,467	51,093	1.15%
2005	1,367	1,261	967	1,166	12,598	3,033	16,610	13,469	50,471	-1.22%
2006	1,381	2,242	969	1,169	12,830	3,059	17,075	13,664	52,390	3.80%
2007	1,395	2,082	970	1,173	12,953	3,071	17,411	13,757	52,812	0.81%
2008	1,409	1,924	972	1,177	13,095	3,087	17,776	13,872	53,311	0.94%
2009	1,423	1,890	973	1,180	13,234	3,101	18,139	13,981	53,920	1.14%
2010	1,437	1,853	975	1,184	13,404	3,120	18,545	14,126	54,644	1.34%
Compound Annual Growth	0.53%	0.09%	-0.35%	0.20%	0.59%	1.04%	1.94%	0.79%	1.06%	
City Share:										
in 2000	80%	44%	90%	96%	94%	94%	87%	85%	85%	
in 2010	80%	36%	87%	91%	83%	82%	77%	79%	76%	

Bureau of Business and Economic Research, University of New Mexico.

Commercial Square Feet

Employment projections were translated into demands for commercial space by using employee per square foot ratios for different land uses as provided by the City Planning Department. (See discussion in Appendix B).

Tables 2.5 and 2.6 present the projected demands for commercial space in the City of Santa Fe under the slower growth and trend scenarios.

Table 2.5

DEMAND FOR COMMERCIAL SPACE

SCENARIO 1: MARKET PROJECTIONS - NO WATER SHORTAGE

CITY OF SANTA FE SLOWER GROWTH

	Retail	Office	Flex, Warehouse, Industrial	Govt		
Sq. Ft. per Employee	500	330	1,000	330		
	Number of Jobs Added					
2000	291	393	-101	384		
2001	-334	27	-91	6		
2002	257	308	3	-206		
2003	247	413	18	72		
2004	227	523	19	263		
2005	200	456	19	272		
2006	242	403	5	195		
2007	142	229	5	93		
2008	162	256	5	115		
2009	158	249	5	109		
2010	188	290	5	145		
	Floor Area (Sq. Ft.) Required				Total	Private
2000	145,734	129,617	-101,129	126,629	300,851	174,222
2001	-166,958	8,880	-91,475	1,951	-247,602	-249,553
2002	128,378	101,676	2,645	-67,839	164,860	232,699
2003	123,545	136,163	18,360	23,850	301,917	278,068
2004	113,336	172,465	18,523	86,765	391,089	304,324
2005	100,166	150,500	18,687	89,878	359,230	269,352
2006	120,828	132,981	5,179	64,220	323,209	258,988
2007	70,761	75,643	5,209	30,735	182,347	151,612
2008	80,781	84,473	5,239	38,071	208,564	170,493
2009	78,999	82,292	5,268	35,860	202,419	166,559
2010	93,783	95,614	5,298	47,781	242,476	194,695

Bureau of Business and Economic Research, University of New Mexico.

Table 2.6

DEMAND FOR COMMERCIAL SPACE

SCENARIO 1: MARKET PROJECTIONS - NO WATER SHORTAGE

CITY OF SANTA FE TREND GROWTH

	Retail	Office	Flex, Warehouse, Industrial	Govt		
Sq. Ft. per Employee	500	330	1,000	330		
		Jobs Added in				
2000	291	393	-101	384		
2001	-353	242	-91	6		
2002	256	135	3	-187		
2003	313	523	18	192		
2004	341	669	19	394		
2005	313	640	19	355		
2006	276	598	19	302		
2007	146	421	19	122		
2008	171	461	19	153		
2009	166	458	19	144		
2010	203	518	20	193		
		Floor Area (Sq. Ft.) Required			Total	Private
2000	145,734	129,617	-101,129	126,629	300,851	174,222
2001	-176,347	79,786	-91,475	1,951	-186,085	-188,036
2002	127,971	44,398	2,645	-61,549	113,465	175,015
2003	156,368	172,567	18,360	63,292	410,587	347,295
2004	170,366	220,627	18,523	130,083	539,599	409,516
2005	156,582	211,239	18,687	117,054	503,562	386,508
2006	138,174	197,187	18,852	99,774	453,987	354,214
2007	73,085	139,047	19,019	40,143	271,293	231,150
2008	85,408	152,061	19,187	50,523	307,178	256,656
2009	82,790	151,185	19,356	47,357	300,688	253,331
2010	101,608	170,830	19,526	63,618	355,582	291,964

Bureau of Business and Economic Research, University of New Mexico.

Taxable Gross Receipts

Taxable gross receipts for the incorporated city (excluding the airport) were forecast using a gross receipts tax model. Explanatory variables are private sector non-agricultural employment and total housing permits over a 12-month period, lagged six months. Both variables are forecast in our baseline scenario. Housing units permitted were assumed to be 5 percent more than housing demand as determined by the population forecast. This figure comes from the 2000 Census and is the percentage of total housing units that are used seasonally or as vacation/recreation homes. Table 2.7 presents the forecasted annual growth rates for the gross receipts tax base within the City limits under the slower growth and the trend scenarios.

Table 2.7
TAXABLE GROSS RECEIPTS PROJECTIONS
CITY OF SANTA FE
SCENARIO 1: MARKET PROJECTIONS - NO WATER SHORTAGE

	Year-Over-Year Growth (Calendar Years)	
	Slow Growth	Trend Growth
1999	5.9%	5.9%
2000	6.2%	6.2%
2001	0.1%	0.1%
2002	2.4%	1.7%
2003	4.6%	5.2%
2004	4.9%	5.8%
2005	4.5%	5.5%
2006	4.0%	4.8%
2007	3.6%	4.3%
2008	3.7%	4.4%
2009	3.6%	4.3%
2010	3.9%	4.6%

Bureau of Business and Economic Research, University of New Mexico.

Taxable Value for Property Tax Purposes

The taxable value of buildings – residential and private non-residential – permitted over the forecast period within the current City limits were estimated from the forecasts of new housing units and new commercial construction within the City limits. New single-family units were assumed to have an average value of $250 thousand; new multi-family units were priced at $100 thousand.

Table 2.8
TAXABLE VALUE OF BUILDINGS PERMITTED
CITY OF SANTA FE
SCENARIO 1: MARKET PROJECTIONS - NO WATER SHORTAGE

	Thousands of Dollars	
	Slow Growth	Trend Growth
2000	34,842	34,842
2001	42,145	42,145
2002	31,872	29,437
2003	31,726	34,649
2004	30,566	35,007
2005	26,618	31,564
2006	21,598	25,619
2007	15,536	18,894
2008	14,715	18,353
2009	12,678	16,342
2010	12,029	16,136

Bureau of Business and Economic Research, University of New Mexico.

Commercial construction was estimated based on $76 per square foot as calculated from the FW Dodge reports on construction awards for Santa Fe County. Construction costs were assumed to be 60 percent of project value. All new single-family homeowners were assumed to take the $2000 head of household exemption.

ALTERNATIVE SCENARIOS

Market Growth – Water Shortage

Table 2.9 presents the population and housing unit impacts for Scenario 2, Market Growth-Water Shortage. The Urban Area's projected population for 2005 is 85,327. In the following 12 months, the baseline projection for the Urban Area is for an additional 880 persons and demand for 307 housing units. The City moratorium lowers these projections to a population change of 447 persons and demand for 152 housing units in the Urban Area. Over the next four years, the baseline projections resume and seventy-five percent of the population growth and housing unit demand restricted by the moratorium is reintroduced into the Urban Area. Overall, the population growth for the Urban Area and the Central Region is lower than the baseline projections.

Table 2.9
POPULATION CHANGE AND HOUSING DEMAND
SCENARIO 2: MARKET GROWTH - WATER SHORTAGE

	Population[1]		
Area:	2000	2005	2010
Central Region	105,272	116,964	128,410
Total Urban Area	80,056	85,327	89,626
Total Urban Area Baseline	*80,056*	*85,327*	*89,734*
Central Region (outside of TUA)	25,217	31,637	38,784

	Population Change			
Area:	2000 - 2005	2005 - 2006	2006 - 2010	2000 - 2010
Central Region	11,692	1,792	9,653	23,137
Total Urban Area	5,272	447	3,851	9,570
Total Urban Area Baseline	*5,272*	*880*	*3,527*	*9,679*
Central Region (outside of TUA)	6,420	1,344	5,802	13,567

	Additional Housing Unit Demand			
Area:	2000 - 2005	2005 - 2006	2006 - 2010	2000 - 2010
Central Region	4,675	718	3,751	9,143
Total Urban Area	1,974	152	1,310	3,436
Total Urban Area Baseline	*1,974*	*307*	*1,197*	*3,478*
Central Region (outside of TUA)	2,701	566	2,441	5,708

1 - midyear (July 1) population.

Bureau of Business and Economic Research, University of New Mexico.

A number of factors will shape the moratorium's impact on population and housing demand. Large projects, either recently completed or underway at the time of the moratorium may add housing unit stock and reduce the excess demand during the 12 months of the moratorium. Additionally, given the historic shift of population to areas outside the City and the ongoing development in the County's Community College District, it is imaginable that current water crisis may spur development in areas outside the City and the City's moratorium.

The water shortage may begin to adversely affect construction plans and economic activity in 1994 even before the moratorium on construction is announced. The employment impacts are presented in the second column of Table 2.12, page 45. Our estimates assume building construction falls by roughly 10 percent in 2004. Retail employment is flat in 1994 as tourism falls off and as plans are put on hold. Services see tepid job growth.

The 12-month moratorium on building is assumed only to affect new projects, allowing what is already under construction to be completed. The moratorium is assumed to be across the board on all residential and non-residential projects; no new private projects will be permitted. We assume that construction work on public projects – building and non-building -- will continue, as will additions and alterations to existing buildings.

To estimate the impact on construction employment, the total value of commercial construction employment was compared with total taxable receipts from construction. During the 1997 to 2001 period, the total value of permitted construction projects was 40 percent of total taxable gross receipts from contract construction within the City of Santa Fe. The value of building construction permitted does not include the site preparation costs, which vary depending upon location and the type of development. Based on other work, we assumed these costs might add another 10 percent, which would put the total construction activity related to new building construction at about 50 percent of total construction dollars. We assumed that the employment associated with new building construction is about half of the total and that the effects would be spread over two years. Construction would continue on buildings started in 1994.

Some projects may be cancelled as a result of the moratorium; some who were going to build in the urban area may decide to build outside. If the water shortage were to reach a Level 4 then all of Santa Fe County may shut down to new building activity. If not, some of those who would build within the City may simply buy land and build outside the City – in the Urban Area or in the rest of the County. Many are likely to put their plans on hold. They have already invested much time, effort and money in Santa Fe. They will simply wait until the moratorium is lifted. For developers with projects both in the City and outside, the moratorium is likely to shift attention and resources to projects outside.

Some may respond to the moratorium by scrapping plans to build in favor of fixing up existing structures.

For 2005, then, we assumed construction activity within the City will take a major hit. There will be somewhat more construction activity in the remainder of the county than otherwise but the pick-up will be insufficient to offset the loss within the City. The City's retail trade and service sectors will be adversely affected by the reduced construction activity and employment in these sectors will be less than otherwise.

The effects of the moratorium will be felt in 1996 and beyond. Much will depend upon the severity of the water problems and how decision-makers react to the water crisis. Inaction or fumbling efforts are likely to send a bad message about Santa Fe as a place to live and do business and will discourage investment. On the other hand, the water problem can be turned into an asset if decision-makers demonstrate resolve and put in place credible policies to deal effectively with the City's long-term water needs. Cities throughout the west face water problems yet continue to attract investment because of the quality of life offered. Best to invest in a place that has confronted the water issue head on and developed credible long-term solutions.

Modeling the longer-term impacts of a water shortage and moratorium is at best guesswork. In 2006, we assume a flurry of permit applications from those whose projects were put on hold by the moratorium. This may or may not boost construction activity in 2006 and 2007. There will be less projects already under construction from 1995, and some will have dropped their plans. Our scenario assumes many will rush to build projects put on hold by the moratorium and that this will result, on net, in somewhat higher activity in both 2006 and 2007. The pick-up in these years will be less than what was lost in 2005. Finally, we assume that the water shortage has an adverse effect on investment in the Santa Fe area, such that the region sees slower growth than otherwise throughout the forecast period. We have assumed slower growth (90% of what would otherwise be seen) in building construction activity and in retail trade and services through the forecast period.

The changes in building construction and in employment result in changes in the forecasts for gross receipts tax revenues and for the property tax base. The new forecasts for these two revenue sources are given respectively in the second columns of Tables 2.14 and 2.15 (pages 47 and 48).

Water Budget – Moderate Limit

Table 2.10 presents the baseline population projections and change for 2000 – 2005 and 2005 – 2010. New housing units allowable were calculated by multiplying the maximum number of water system hook-ups permitted (650 annually) and subtracting hook-ups to existing units (20.9 percent based on 1996 – 2000 data).

Table 2.10
POPULATION CHANGE AND HOUSING DEMAND
SCENARIO 3: WATER BUDGET - MODERATE LIMITS

	Population[1]		
Area:	2000	2005	2010
Central Region	105,272	116,964	128,518
Total Urban Area	80,056	85,327	89,734
Central Region (outside of TUA)	25,217	31,637	38,784

	Population Change		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	11,692	11,554	23,245
Total Urban Area	5,272	4,407	9,679
Central Region (outside of TUA)	6,420	7,147	13,567

	Additional Housing Unit Demand		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	4,675	4,511	9,186
Total Urban Area	1,974	1,504	3,478
Central Region (outside of TUA)	2,701	3,007	5,708

Urban Area Permits:	2000 - 2005	2005 - 2010	2000 - 2010
Water System Hook-ups	3,250	3,250	6,500
less: Existing Unit Hook-ups	679	679	1,358
plus: (exempted) Affordable Housing	257	257	514
equals: Residential Permits Available	2,828	2,828	5,656
Total Urban Area:			
Excess Demand (available permits)	-854	-1,323	-2,177

1 - midyear (July 1) population.

Bureau of Business and Economic Research, University of New Mexico.

In this scenario, the housing units allowed exceed the baseline demand for new housing units. Demand for an additional 3,478 housing units is estimated in the Urban Area between 2000 and 2010 – 1,974 in the first half of the decade and 1,504 in the second half. Based on a maximum of 650 water system hook-ups, a total of 5,656 residential permits would be available between 2000 and 2010, divided equally in the first and second half of the decade. In the first half of the decade the number of permits available is estimated to exceed the demand for housing units by 854, and by 1,323 in the second half of the decade, and by 2,177 over the entire decade.

The constraints imposed under the moderate limit would have no significant effect on employment, (third column of Table 2.12 on page 45) within the Urban Area. Commercial construction would be unaffected under the slower growth scenario, as projected commercial square feet are in all years less than 450,000 square fee (third column of Table 2.13 on page 46). The moderate limit would be

constraining of commercial construction in one year under the trend growth scenario. The adverse impact on construction employment would only be about 1 percent and there would be no effects on other sectors. The constraint of 75 hotel rooms per year is not expected to have an impact under either the trend or the slow growth scenario. During the 1990's roughly 75 rooms were added per year. (See discussion on tourism and the projected construction of hotel rooms in Appendix 2.) The overall growth in the trend scenario is lower than the compound annual growth during the 1990's. The slight impacts the moderate limit will have on trend growth in gross receipts are shown in the third column of Table 2.14, page 47, and on additions to the property tax base in the third column of Table 2.15, page 48.

Water Budget – Tight Limit

Baseline demand for housing units exceeds the number of units allowed in Scenario 4 between 2000 and 2005 and for the decade as a whole, though in the second half of the decade adequate permits will be available to accommodate housing demand (Table 2.11 following page). The scenario's maximum water system hook-up level of 360 translates to 1,566 residential permits in each half of the decade. In the first half of the decade, housing unit demand exceeds available residential permits by 408, though in the second half of the decade demand for residential units will be 62 less than number of permits available due to a smaller projected population change for the time period.

While demand is estimated to exceed the number of allowable units by roughly 80 per year, the excess demand may be accommodated in a number of ways. Because Urban Area housing demand declines through the decade, there is a disproportionate amount of demand is in the early years of the ordinance. Similar to the moratorium scenario, large recently completed projects and those underway will add housing stock. The impending water crisis in the City may redirect development effort to areas outside of the City and reduce demand for Urban Area housing. Additionally, as is sometimes the case when growth limits are adopted, developers may rush to get projects permitted before the ordinance is in place creating an excess supply of housing that offsets future demand.

The constraints are projected to have some limited impacts on housing construction in the Urban Area and within the City limits. The tighter limits are expected to constrain commercial construction to some degree under both scenarios, but effects are much more pronounced in the higher growth trend scenario. The calculations for commercial construction look at space requirements associated with expanding employment opportunities in the private and in the public sector (half of the new government workers are assumed to require privately owned space). In reality, these workers are likely to be accommodated in currently vacant or underutilized space. So, to some extent the estimates may overstate actual demand for space and the impacts of limiting commercial construction. On the other hand, some of the construction that is thwarted may be speculative.

Table 2.11
POPULATION CHANGE AND HOUSING DEMAND
SCENARIO 4: WATER BUDGET - TIGHT LIMITS

	Population[1]		
Area:	2000	2005	2010
Central Region	105,272	116,964	128,518
Total Urban Area	80,056	85,327	89,734
Central Region (outside of TUA)	25,217	31,637	38,784

	Population Change		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	11,692	11,554	23,245
Total Urban Area	5,272	4,407	9,679
Central Region (outside of TUA)	6,420	7,147	13,567

	Additional Housing Unit Demand		
Area:	2000 - 2005	2005 - 2010	2000 - 2010
Central Region	4,675	4,511	9,186
Total Urban Area	1,974	1,504	3,478
Central Region (outside of TUA)	2,701	3,007	5,708

Urban Area Permits:	2000 - 2005	2005 - 2010	2000 - 2010
Water System Hook-ups	1,800	1,800	3,600
less: Existing Unit Hook-ups	376	376	752
plus: (exempted) Affordable Housing	142	142	285
equals: Residential Permits Available	1,566	1,566	3,132
Total Urban Area:			
Excess Demand (available permits)	408	-62	346

1 - midyear (July 1) population.

Bureau of Business and Economic Research, University of New Mexico.

As shown in Table 2.12 (fourth column, page 45) the construction employment impacts are relatively minor in the slower growth scenario and the impacts on other sectors are insignificant. Not surprisingly, greater impacts on commercial construction emerge in the trend growth scenario. With less commercial space being built, employment growth, particularly in the retail trade and service sectors, is subdued, and City revenues from gross receipts taxes grow more slowly. The net affect on the property tax base is discussed below.

With less new construction going within the Urban Area and within the City limits, existing space will sell or rent at a premium. Several developments are likely. More marginal businesses will be pushed out: they will fail or they will be forced to relocate. There will be more pressures to up-zone residential properties for commercial uses. More will be spent on renovation and rehab. And there will be a push outward to where growth does not face the same constraints. The

County outside the Urban Area may well benefit, attracting more residential and more commercial development than would otherwise take place.

The impacts on the City's property tax base of these developments are in different directions (fourth column of Table 2.15 page 48). The table charts the loss in property tax base due to the restrictions on new construction – on "new value." On the other hand, the restrictions may mean a faster appreciation of existing properties. Yield control limits the revenue windfall from rising assessments on the City's operating levy, while allowing the City to benefit from construction which adds new value. The impact of the tight limits on the City's operating levy and on general fund revenues is decidedly negative. The impact on bonding capacity is less straightforward. This is because increasing prices for existing properties will have a positive affect on the City's bonding capacity. The impact of rising property values will offset at least some of the loss in new value associated with the commercial construction limits.

Table 2.12

EMPLOYMENT GROWTH UNDER ALTERNATIVE SCENARIOS

SLOWER GROWTH

Growth in Total Non-Ag Employment

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits with Hotels	Tight Limits with No Hotel Rooms
2003	1.5%	1.5%	1.5%	1.1%	1.0%
2004	2.1%	0.8%	2.1%	1.8%	1.7%
2005	1.9%	-0.9%	1.9%	1.7%	1.5%
2006	1.6%	3.5%	1.6%	1.5%	1.4%
2007	0.9%	0.7%	0.9%	1.0%	0.8%
2008	1.0%	0.6%	1.0%	1.3%	1.2%
2009	1.0%	0.8%	1.0%	0.8%	0.6%
2010	1.1%	1.0%	1.1%	1.4%	1.2%

TREND GROWTH

Growth in Total Non-Ag Employment

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits with Hotels	Tight Limits with No Hotel Rooms
2003	2.1%	2.1%	2.1%	1.5%	1.4%
2004	2.8%	1.1%	2.8%	2.2%	2.0%
2005	2.6%	-1.2%	2.5%	2.1%	1.9%
2006	2.2%	3.8%	2.3%	1.8%	1.5%
2007	1.3%	0.8%	1.3%	1.3%	1.0%
2008	1.5%	0.9%	1.5%	1.5%	1.1%
2009	1.4%	1.1%	1.4%	1.1%	0.7%
2010	1.6%	1.3%	1.6%	1.6%	1.1%

Bureau of Business and Economic Research, University of New Mexico.

Table 2.13
DEMAND FOR NEW COMMERCIAL SPACE UNDER ALTERNATIVE SCENARIOS

SLOWER GROWTH

Additional Commercial Space to Meet Private Sector Employee Space Requirements (sq. ft.)

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits[1]
2003	278,068	278,068	278,068	225,000
2004	304,324	88,457	304,324	225,000
2005	269,352	(10,102)	269,352	210,314
2006	258,988	226,623	258,988	225,000
2007	151,612	177,851	151,612	116,486
2008	170,493	148,829	170,493	225,000
2009	166,559	145,201	166,559	110,097
2010	194,695	169,532	194,695	225,000

TREND GROWTH

Additional Commercial Space to Meet Private Sector Employee Space Requirements (sq. ft.)

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits [2]	Water Budget - Tight Limits [3]
2003	347,295	347,295	347,295	250,000
2004	409,516	96,223	378,599	250,000
2005	386,508	19,198	385,774	250,000
2006	354,214	297,043	353,566	227,609
2007	231,150	194,954	230,808	172,229
2008	256,656	216,131	256,256	250,000
2009	253,331	212,939	252,943	164,430
2010	291,964	244,984	291,488	250,000

1 - Assuming one half of the new public employees will be housed in private commercial space, the square footage preempted by the water budget tight limits under the slow growth scenario would be 65,000 in 2003, 57,000 in 2004, 30,000 in 2005, 33,000 in 20.

2 - Making the assumption as above, there is only one year in which the moderate limits will constrain commercial construction -- 2004, when 25,000 square feet would be preempted.

3 - If add demand stemming from government employees, the excess demand (in 1,000 square feet) would be 154 in 03, 95 in 04, 220 in 05, 52 in 06, 81 in 08, 125 in 10.

Bureau of Business and Economic Research, University of New Mexico.

Table 2.14

GROWTH IN GROSS RECEIPTS TAX BASE UNDER ALTERNATIVE SCENARIOS

SLOWER GROWTH

Growth in Taxable Gross Receipts

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits, No Hotel Rooms
2003	4.6%	4.6%	4.6%	3.7%
2004	4.9%	2.4%	4.9%	3.8%
2005	4.5%	-1.8%	4.5%	4.2%
2006	4.0%	9.7%	4.0%	3.8%
2007	3.6%	2.5%	3.6%	4.0%
2008	3.7%	3.1%	3.7%	4.3%
2009	3.6%	3.4%	3.6%	3.3%
2010	3.9%	3.7%	3.9%	4.4%

TREND GROWTH

Growth in Taxable Gross Receipts

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits, No Hotel Rooms
2003	5.2%	4.9%	5.2%	3.9%
2004	5.8%	1.5%	5.7%	4.6%
2005	5.5%	1.5%	5.4%	4.6%
2006	4.8%	7.9%	5.0%	3.9%
2007	4.3%	3.5%	4.3%	4.2%
2008	4.4%	3.7%	4.4%	4.3%
2009	4.3%	4.0%	4.3%	3.8%
2010	4.6%	4.1%	4.6%	4.5%

Bureau of Business and Economic Research, University of New Mexico.

Table 2.15

ADDITIONS TO PROPERTY TAX BASE UNDER ALTERNATIVE SCENARIOS

SLOWER GROWTH

New Taxable Value from New Construction ($000)

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits, No Hotel Rooms
2003	31,726	31,726	31,726	31,726
2004	30,566	19,680	30,566	25,433
2005	26,618	-	26,618	21,679
2006	21,598	30,859	21,598	18,040
2007	15,536	15,731	15,536	14,053
2008	14,715	13,049	14,715	18,072
2009	12,678	11,212	12,678	10,294
2010	12,029	10,585	12,029	14,364

TREND GROWTH

New Taxable Value from New Construction ($000)

	Market Growth - No Water Shortage	Market Growth- Water Shortage	Water Budget - Moderate Limits	Water Budget - Tight Limits, No Hotel Rooms
2003	34,649	34,649	34,649	30,541
2004	35,007	20,008	33,702	25,433
2005	31,564	-	31,533	23,354
2006	25,619	33,832	25,591	18,101
2007	18,894	16,453	18,880	16,407
2008	18,353	15,890	18,336	18,072
2009	16,342	14,072	16,325	12,588
2010	16,136	13,771	16,116	14,364

Bureau of Business and Economic Research, University of New Mexico.

GROWTH DEPENDENCY

How dependent is the Santa Fe area economy and the City of Santa Fe government on growth and construction activity? In an earlier section, it was noted that construction employment accounted for 6.9 percent of total non-agricultural employment in 2000 and that during the 1990's taxable gross receipts from construction comprised anywhere between 7.5 percent and 9.7 percent of the total tax base. These numbers are relatively small and suggest that growth and new construction (since construction also includes alterations and additions to existing buildings and rehabilitation of roads and other infrastructure) may play a relatively minor role in the City's economy. Of course, the oil and gas industry directly employs a relatively small number of people – 10,000 or so in New Mexico, and yet obviously has a major impact on the economies of certain regions of the state and on State revenues.

The best historical time series on the City of Santa Fe economy are the data produced by the New Mexico Taxation and Revenue Department on the City's taxable gross receipts. Figure 3.1 plots the growth year-over-year by quarter since the first quarter of 1990 in total taxable receipts, in nominal terms and in real terms, after adjusting for inflation using the Consumer Price Index for All Urban Consumers (CPI-U).

Figure 3.1

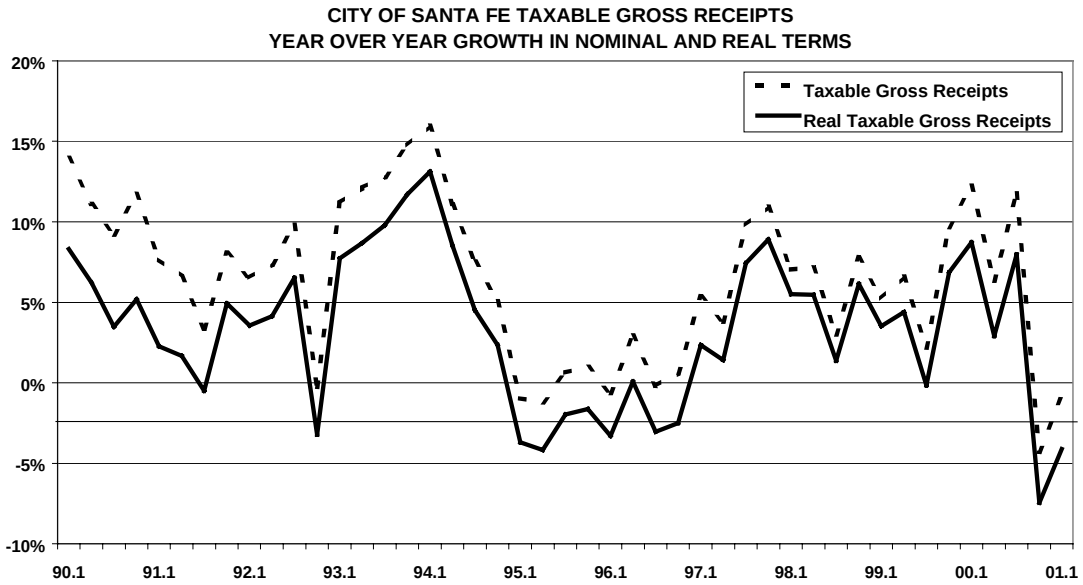


Figure 3.2 presents the relationship between the year-over-year growth in taxable gross receipts adjusted for inflation and the growth in employment. Two measures of employment are used, Santa Fe MSA total non-agricultural employment and Santa Fe County Covered Employment. Note that the quarterly

changes in the growth in taxable gross receipts are much greater than those in employment.

As was demonstrated earlier, total employment is much less volatile than private sector employment and it is private sector activity that is reflected in taxable gross receipts. Figure 3.3, on the following page, presents the relationship between the growth in real taxable gross receipts and in private sector employment. The relationship is much stronger, but private sector employment growth fails to explain the amplitude of the cycles in taxable gross receipts.

Figure 3.2

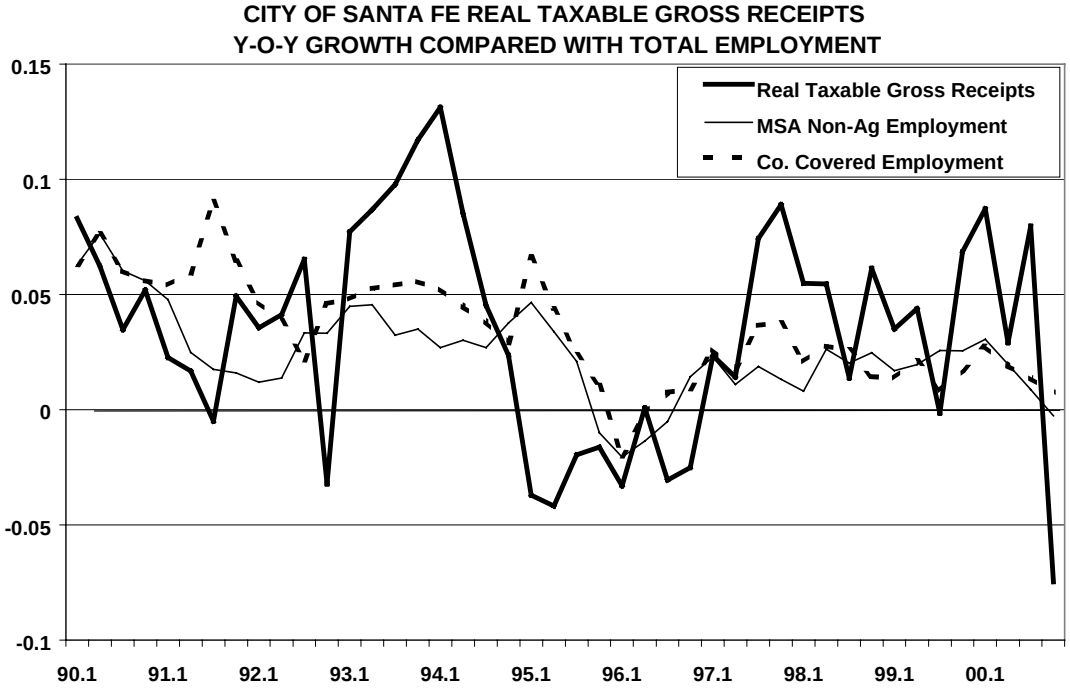


Figure 3.4, also on the following page, examines the importance of the construction cycle, specifically the number of housing units permitted within the City of Santa Fe, in explaining the variation in the year-over-year growth in taxable gross receipts. The housing data are extremely volatile and effects on the economy and the City's taxable gross receipts are felt with various lags. To deal with these problems, the construction variable used is the total number of housing units permitted over the four quarters ending in the present quarter, and growth is calculated as the change over the same quarter in the previous year. As the variation in receipts is much less than the variation in housing units permitted, the data are plotted on a graph with two different y-axes. The left axis applies to the data on taxable gross receipts, while the growth in housing permits is plotted against the right axis.

Figure 3.3

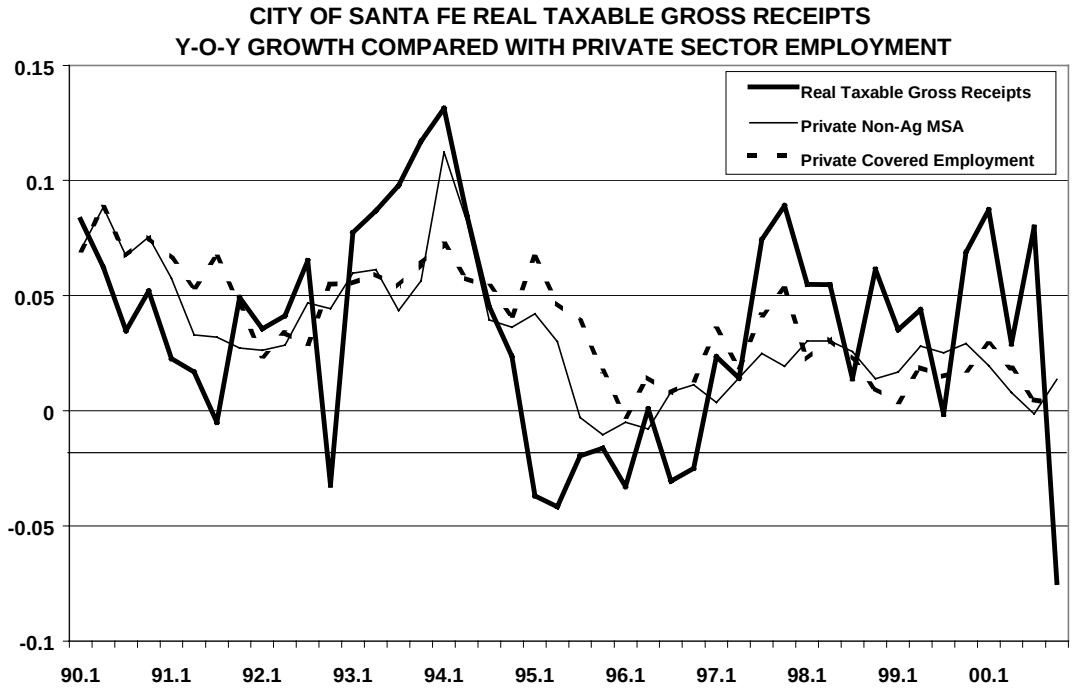


Figure 3.4

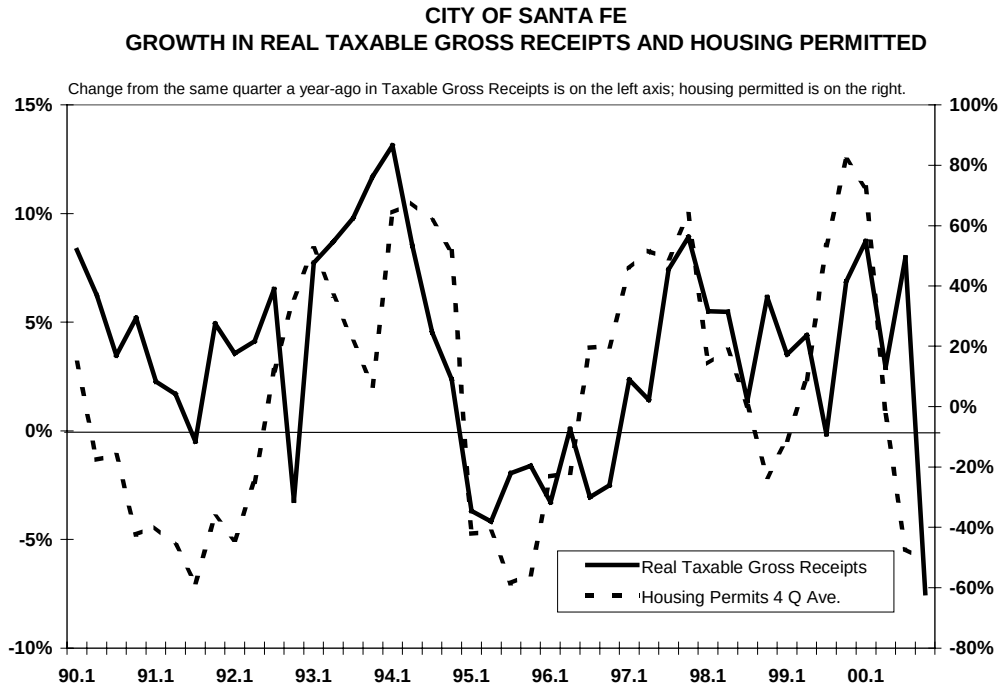
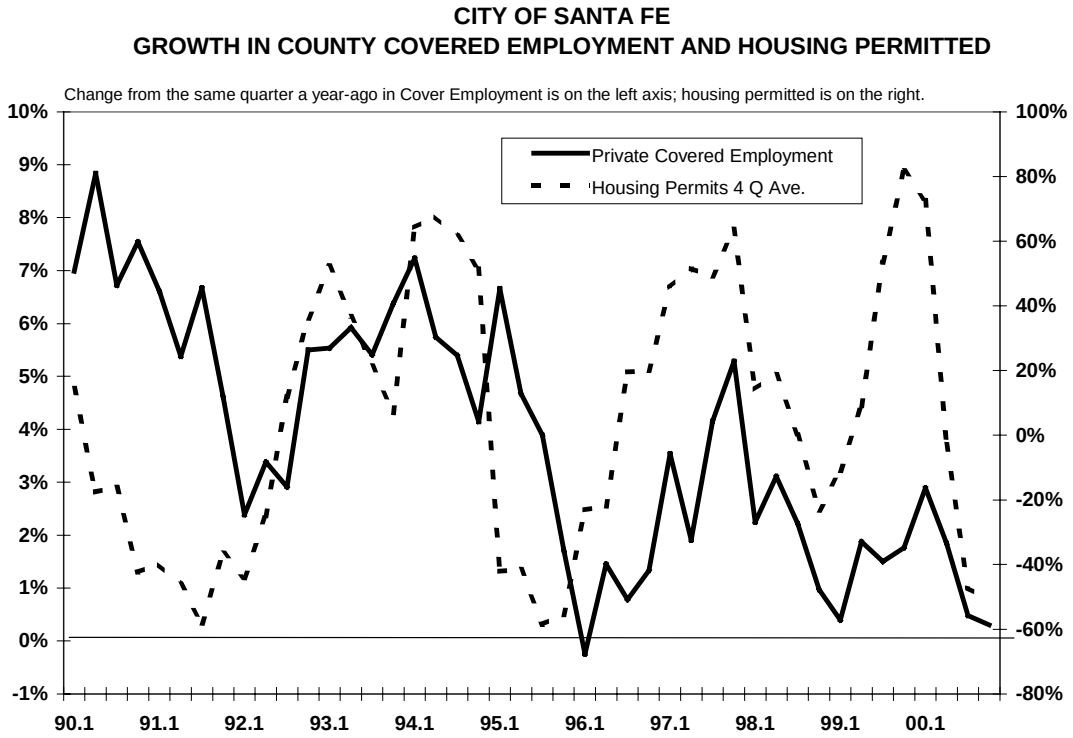


Figure 3.5 clearly implies that the construction cycle, more specifically the housing cycle, is important in explaining the swings in the City of Santa Fe's

taxable gross receipts. The effect is much greater than suggested by the relative size of the construction sector. This is because activity and employment in other sectors are affected, and this is true even though the purchases and the taxable gross receipts may be reflected in the construction contractors' billings and the gross receipts taxes paid on their receipts. To give some examples, when the land is prepared for development, there will need to be certain investments in infrastructure and the planning and design is likely to involve engineers, who are classified in the services sector. The planning and design of a home or of a housing development will involve architects, who are also classified under services. The project itself will involve purchases of various building materials (typically retail trade). In the final stages, there will be purchases of various appliances, carpeting, draperies (typically from retail establishments). Then the new owners may want to purchase new furniture, bedspreads, artwork, and so on (again, typically retail but if purchasing from the handicraft industry, manufacturing).

Figure 3.5



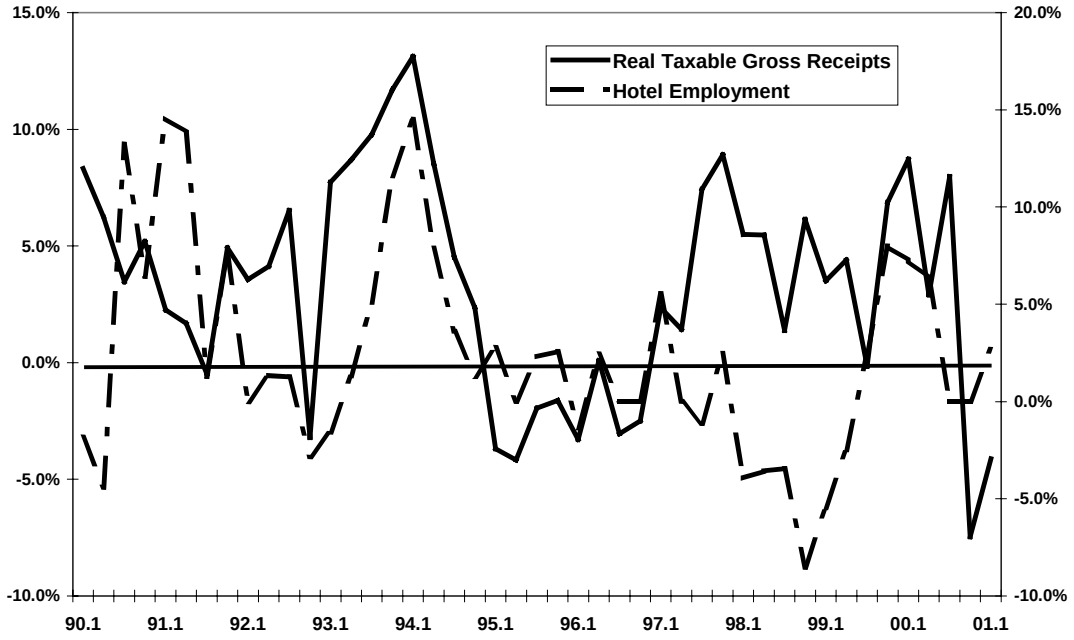
The above suggests that the housing cycle will impact more than construction taxable gross receipts. New Mexico municipalities generally derive some 70 percent of their general fund revenues from the gross receipts tax. Because construction, and particularly housing construction, has such an impact on the overall growth of the gross receipts tax base, many of these municipalities are in a sense addicted to growth.

A final graph, suggested by the comments above, looks at the relationship between private sector covered employment in Santa Fe County (the closest match) and the City's housing permits. The same technique applied with taxable gross receipts is used here. While the housing cycle cannot explain everything that happens to private sector employment, the graph clearly suggests that there is a relationship.

One further relationship was examined using graphs - the dependence of the City of Santa Fe economy on tourism. The proxy used for tourism was MSA hotel employment in the current quarter. This seemed to work better than a moving average and made more sense, since tourism involves short-term stays. Figure 3.6 graphs the relationship, using the same two axes technique as was used with building permits. The relationship appears to be quite strong for some periods. It should be noted that taxable gross receipts will fail to pick up sales of art and other goods if the items are mailed out-of-state, so the impact of tourism will be imperfectly captured.

Figure 3.6

CITY OF SANTA REAL TAXABLE GROSS RECEIPTS
Y-O-Y GROWTH COMPARED WITH MSA HOTEL EMPLOYMENT



Finally, regression models were built to explain City taxable gross receipts. The two best models are summarized below in Table 3.1. The results are consistent with a hypothesis that the housing cycle has a significant influence on economic activity as measured by the gross receipts tax base. The housing permit variable has the expected sign and is significant at the 0.5 percent level. Tourism, as measured by hotel employment, also has an effect on taxable gross receipts, and

the effect has the expected sign. However, this variable is significant only at the 5 percent level.

Table 3.1

CITY OF SANTA FE TAXABLE GROSS RECEIPTS REGRESSION RESULTS

Dependent Variable: City of Santa Fe Taxable Gross Receipts

	With Constant Term		
Independent Variables	Coefficient	T-Statistic	Signficant
Constant	5,291.19	0.2787	
Private Sector Covered Employment (County)	7.02	10.9928	0.005
Housing Permitted -- 4 quarters	40.37	3.9005	0.005
Lodging Employment (MSA)	20.02	1.9176	0.050
Q2 dummy	(22,387.03)	-5.5150	0.005
R Square	0.9121		
Adj R Square	0.9031		
Observations	44		

	Without Constant Term		
Independent Variables	Coefficient	T-Statistic	Signficant
Constant			
Private Sector Covered Employment (County)	7.05	11.2918	0.005
Housing Permitted -- 4 quarters	41.39	4.3197	0.005
Lodging Employment (MSA)	21.49	2.4100	0.050
Q2 dummy	(22,470.96)	-5.6161	0.005
R Square	0.9120		
Adj R Square	0.8803		
Observations	44		

Bureau of Business and Economic Research, University of New Mexico.

RELATED RESEARCH AND CASE STUDIES

This section reviews the growth control efforts of other cities and presents general findings regarding the relationship between growth control efforts and related economic conditions. Three case studies of communities that have growth control efforts in place follow. These communities have similar characteristics to Santa Fe and are used to explore growth control impacts.

The body of completed studies offers somewhat ambiguous findings. Because of this and the variety of conditions that shape the impacts of growth control - many of which are not defined in the studies – identifying a case that may even somewhat accurately predict the impact of growth control measures on Santa Fe is extremely unlikely. This being said, when reviewed as a whole the studies provide general findings and may be helpful in guiding the development, structure and implementation of such an ordinance in Santa Fe.

Basic economic theory provides some guidance in understanding the impact of growth controls. Growth controls, like traditional zoning, can limit the supply of land used for housing or the number of housing units that can be developed. The limited supply of land can increase the price of land and, therefore, housing. Indeed, even traditional zoning is recognized as having the potential to increase land and housing prices to the point of being exclusionary (Katz and Rosen). While most studies of growth controls focus on supply side factors, demand for housing also changes and impacts price. Demand side factors include income levels, population changes, and amenities such as quality of life. The impact of the growth control measure is the result of how the growth controls affect both the supply and demand for land, housing and commercial space.

Growth Control Impacts: General Findings

A number of studies using a variety of methodologies were reviewed for this report, including studies relying primarily on statistical analysis (Levin, Katz and Rosen) and those relying on case studies of comparable cities (Landis). These studies include growth management efforts – those that seek to shape and redistribute growth while actively addressing the related economic, social and fiscal effects - as well as growth control policies – ordinances primarily focused on limiting population growth and housing construction (Landis). While there is clearly a continuum of involvement between growth management and growth controls, most studies do not make this differentiation nor do they attach specific findings to type of policy. This being said, general findings of these studies include the following:

Growth Controls May Not Control Growth

Whether growth control efforts actually result in slower or less growth is itself a question. While there are a number of cases where the slow down of growth coincides with the implementation of growth controls, the question still exists as

to whether the decrease, in whole or in part, is attributable to the growth control policy or to a lower demand for housing. Factors that may reduce the demand for housing in an area include changing demographic features, the availability of substitute housing alternatives outside of the controlled area, or economic contraction or slowed expansion.

Growth Areas Can Shift

A growth limit may cause development anticipated in the controlled area to shift to surrounding areas. The growth limit, additional regulatory requirements and uncertainty can all combine to make development outside the controlled area more attractive. This shift can have a large effect on the impact of a growth ordinance in situations where cities welcome growth, as California was described in a 2002 study (Lewis and Neil) and as New Mexico generally does. This welcoming of growth, and the ability of surrounding areas to accommodate it, was not systematically defined in any of the studies.

The availability of surrounding areas to accommodate the shifted demand for housing reduces the demand placed on the controlled area and limits price impacts. As will be explored in a case study, the effect of this "safety valve" is supported by Landis's case study of Thousand Oaks, California. In the first half of the 1980's Thousand Oaks had a growth ordinance in place and was experiencing roughly the same increases in home prices as the Simi Valley, the surrounding area. In 1986, when the Simi Valley imposed growth controls, home prices in Thousand Oaks began rising faster than in Simi Valley.

Regional Demand Impacts Housing Prices

A discussion paper completed for the Brookings Institute examining growth management and affordability concludes: "market demand, not land constraints, is the primary determinant of housing prices." The report cites research conducted in Portland, Oregon, which found that while the urban growth boundary can affect land values, the growth in housing prices is also attributed to factors such as increased housing demand, due to increased employment and income. While acknowledging that growth controls may hinder homebuilding, "broader market forces and state policies probably do more to explain high housing costs and slow production (Lewis and Neiman)."

Low demand for housing around San Luis Obispo County in the early 1990's is due to California's, and particularly the region's, slow economy, and was an important reason why housing growth in the County never encountered the 2.3 percent growth limit (Hand). While a region's shortage of housing can be triggered by an isolated incident, such as the introduction of a large employer, it can also be due to housing supply not keeping pace with population increases over a longer period of time.

Growth Results in Growth Control

The demand for growth control itself is sometimes tied to regional growth. In California, voter initiatives designed to address growth issues have been described as occurring in waves. These waves occurred in the 1970's and late 1980's and 1990's when the state's economy was growing. The initiatives then wane in periods of slower economic growth or contraction. Most recently, it took approximately two years after the end of the recession for the pace of growth regulation in California to pick up (California Department of Housing and Community Development).

Types of Growth Control Tools

A variety of different formal growth controls exist. These tools range from simply capping the number of units or the amount of land to elaborate growth management regulations that accommodate the majority or all new use while attempting to be responsible to the community's constraints and limitations. Levine concluded that measures which limited available land or which down-zoned existing zoning had stronger effects and more direct impact on growth. This being said, some California cities have passed "generous" growth caps that serve little purpose in controlling growth, but which are designed to pacify local anti-growth pressures (Lewis and Neiman, Warner and Molotch).

In addition to formal growth control initiatives, there are a number of less visible traditional planning tools that impact housing supply, and when combined with growth control, can shape the overall impact of the growth control effort. Two of the four tools Lewis and Neiman identify that can reduce residential housing production include initial low-density zoning and restrictive building codes. Additionally, practices such as down-zoning residential densities and reducing floor area ratios, while often not considered growth control measures, have the effect of controlling growth by targeting multi-family and rental housing (Levine). Such exclusionary zoning practices can clearly result in a variety of legal, transportation, political, and economic consequences. Additionally, simply the slow processing of building permits and planning approvals can restrict growth.

Impact on Low-Income/Minority Households

Levine concluded that growth management measures that limit the amount of available land "significantly displaced new construction, particularly rental housing" and the measures "impacted low-income households and minorities particularly." This study, based on two surveys of 490 California cities and counties, concluded that growth control was associated with the increased value of homes and increased household incomes, though these positive effects were partly the result of the production of fewer rental housing units and the introduction of fewer families, which may be younger and have lower incomes.

Indirect Impacts on Housing Prices

In his 1999 study, Levine concludes that, in addition to the direct impact of the restricted supply of housing, local land use controls can increase housing prices

in a variety of indirect ways. Indirect pressures to increase housing prices include increased construction costs due to development requirements, quality of life improvements, and builders shifting to larger, more profitable construction types which may further restrict the supply of lower cost housing (Dowall, Landis 1986). Whether or not increases in housing prices are the result of positive changes such as increased amenities and improved quality of life or due to the negative exclusionary forces, housing and land prices of the city and larger area stand to be impacted.

Research Limitations

Clearly, the overall impact of growth control is the product of many factors. While many of the reviewed studies attempt to attribute specific impacts simply to the presence of growth control policies, Nelson, Pendall, Dawkins and Knapp point out that the effects on housing prices are "complicated to isolate because of the variations in policy styles and implementation, the structure of local housing markets, the patterns of land ownership, and the stringency of other local regulations."

Approaches to Growth Control

Approaches to growth control and, therefore, their impacts vary dramatically. For example, each of California's three waves of growth control initiatives had distinct characteristics, including population and housing growth caps, growth management policies emphasizing making "growth pay for itself," and the use urban growth boundaries and zoning controls. These initiatives used different combinations building heights and FARs, down-zoning, and commercial limits (California Department of Housing and Community Development). Even among distinct growth control approaches, policy specifics such as the allocation of growth to different uses or housing types, the permitted rates of growth, and the permit application and development review process shape the impacts of the growth control efforts.

Regional Demand

While a conscious effort was made to include non-California case studies, the bulk of growth control studies focus on California. When compared to New Mexico, California has a much different economic and demographic history. California's population grew by over four million in the 1990's (13.6 %). While this rate of increase is slower than in New Mexico, California's population increased by more than double New Mexico's current population. Additionally, California began growing much earlier, increasing by ten million residents between 1970 and 1990. This population growth combined with the failure of the regional housing supply to keep pace with the demand caused housing prices throughout California to increase dramatically in the 1980's (Landis).

Data Limitations

While research relies on data, data often shape research. For example, most of the studies use median sales prices of single-family detached housing units.

While this is meaningful, growth controls can have different impacts in different neighborhoods, upon new and existing houses, and the quality of housing (Landis). Few studies examine the impacts on rental and multi-unit housing, segments of the housing market recognized as being vulnerable to growth controls, though for which few reliable data are available.

Existing Conditions

While some of the studies attempted to correlate the number of ordinances in place with specific impacts (i.e., growth, affordability and median sales prices), the existing land use and zoning characteristics onto which these ordinances are applied can influence the outcome. None of the studies adequately described the land use characteristics of the community, such as the availability of developable land, in the study area or adjacent jurisdictions or by zone type. The impacts of each ordinance are shaped by the levels of permitted growth compared to pre-ordinance levels reflected in the initial zoning. For example, imposing a tight growth cap on a community with predominantly low density, large lot zoning will have a different impact than the same growth cap will have on a community with a supply of land zoned for different uses and intensities. Additionally, the efficacy and efficiency of enforcement and processing of building permits adds another layer of local conditions that can influence the impacts of new ordinances.

Ordinances Adoption

The ability of a jurisdiction to gain the support needed to pass a growth control ordinance may indicate that they are already experiencing growth pressures. In fact, most of the growth control measures appear to be passed in reaction to periods of rapid growth (Lewis and Neil). Housing construction in general is cyclical and characterized by peaks and ebbs, making it difficult to distinguish the impact of the ordinance from the changes in the construction cycle. Additionally, there is often a lag period between identifying the need for housing and its eventual introduction into the market, which again impacts the price of housing.

Selected Case Studies

This section presents three case studies of communities that have adopted growth control ordinances. The case studies presented were selected because of shared characteristics with Santa Fe City and the availability of data. Two of the studies, San Luis Obispo and Thousand Oaks, expand upon analyses already completed, while the case study of Boulder tries to isolate specific impacts. San Luis Obispo was selected because of the presence of a growth control policy, its similar size, and its role as an employment center. Thousand Oaks was selected to explore the impact growth ordinances have in the city and in the surrounding county. Boulder was selected because of its experimentation with a cap on retail growth.

San Luis Obispo, California

San Luis Obispo is located roughly halfway between San Francisco and Los Angeles and, somewhat isolated, is where the "old California lifestyle can still be found." The city, home of California Polytechnic State University-San Luis Obispo, has a number of unique characteristics: it was the first U.S. city to ban smoking in all public places; since the mid-1980's the city has had a ban on drive-through fast food to help reduce litter and air and noise pollution; and it has a compact urban form and pedestrian oriented downtown. The area achieved a number five ranking from the Milken Institute on the rate their high tech output grew and was described as the new touchdown spot for Bay Area companies, web design firms and computer consulting services looking to reduce the cost of doing business.

San Luis Obispo is also the employment center of the county. In 1995, the city had 42 percent of the county's jobs and over 17,000 more jobs than the workers of its planning area (the county has four planning areas). Census data also support the City's designation as an employment center. The 2000 Decennial Census shows that the City was home to 17.9 percent of the County's residents. In comparison, the 1997 Economic Census reports that 32.0 percent of the County's taxable establishments, 37.5 percent of employees, 40.1 percent of payroll and 31.8 percent of sales were located in the City.

A San Luis Obispo Council of Governments study states the region's real estate market is among the most expensive in the nation. A primary reason cited for this is the purchase of land and property by San Francisco and Los Angeles residents during the 1970's and 1980's. The resulting increase in popularity and population - combined with the desire to maintain the area's atmosphere – increased the prices of available land and housing.

<u>Growth Controls in Place</u>

Initially, San Luis Obispo's growth controls included an annual residential growth limit of two percent and annexation by referendum only. Since 1990, the City's Residential Growth Management Regulations limit residential construction to an annual growth rate of one percent and were implemented to ensure the City can provide adequate services. Under the regulations, projects providing low-income housing receive favorable consideration. Projects excluded from the limitations include: independent construction projects of one or two dwellings; some group quarters; replacing damaged or destroyed buildings; dwellings resulting from some additions and remodeling; transient lodging (including hotels and motels), and; approved projects that include their own growth management provisions.

Residential development in the unincorporated parts of the County surrounding the City is limited to annual increases of 2.3 percent by the County Growth Management Ordinance. The county limit is only in place when total county housing growth is over 2.3 percent. During the first part of the 1990's, when the

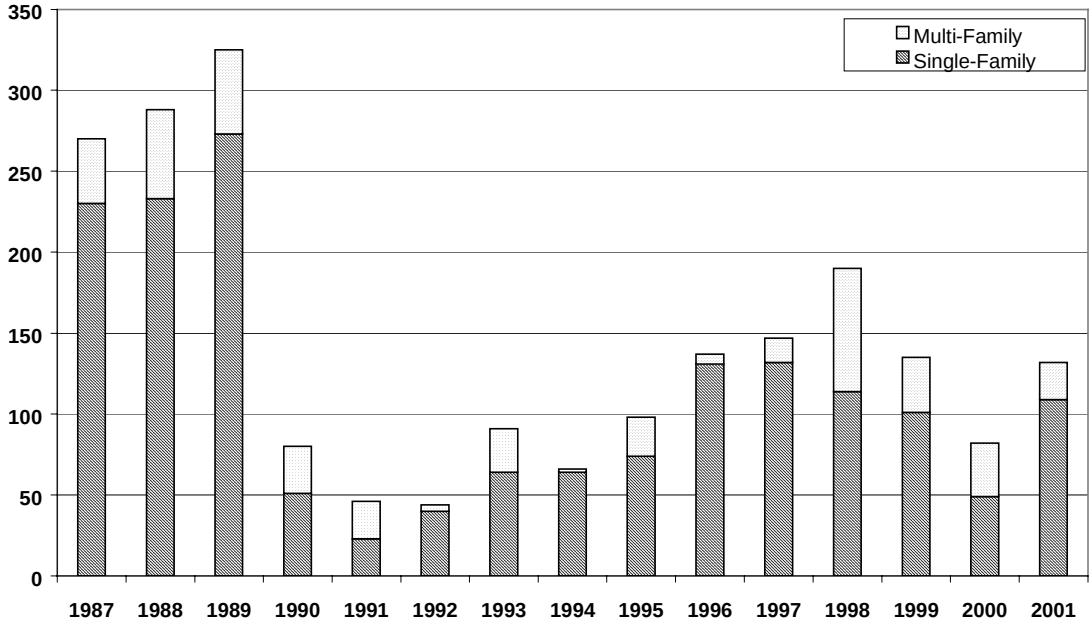
last data are available, growth in the unincorporated parts of the county did not reach the 2.3 percent threshold.

Housing Units Permitted: Number and Valuation

Figure 4.1 shows the number of single and multi-family units permitted in the City of San Luis Obispo between 1987 and 2001. The drop in the number of permits issued, from 273 in 1989 to 51 in 1990, which is also when the City one percent growth cap was established, is dramatic. In order to gauge the extent to which this drop in permitting is attributable to the growth ordinance, the following narrative examines other local and regional factors, including: county and state housing permits, housing prices, employment, population change, and housing units and occupancy status.

Figure 4.1

CITY OF SAN LUIS OBISPO HOUSING UNITS PERMITTED, 1987 - 2001



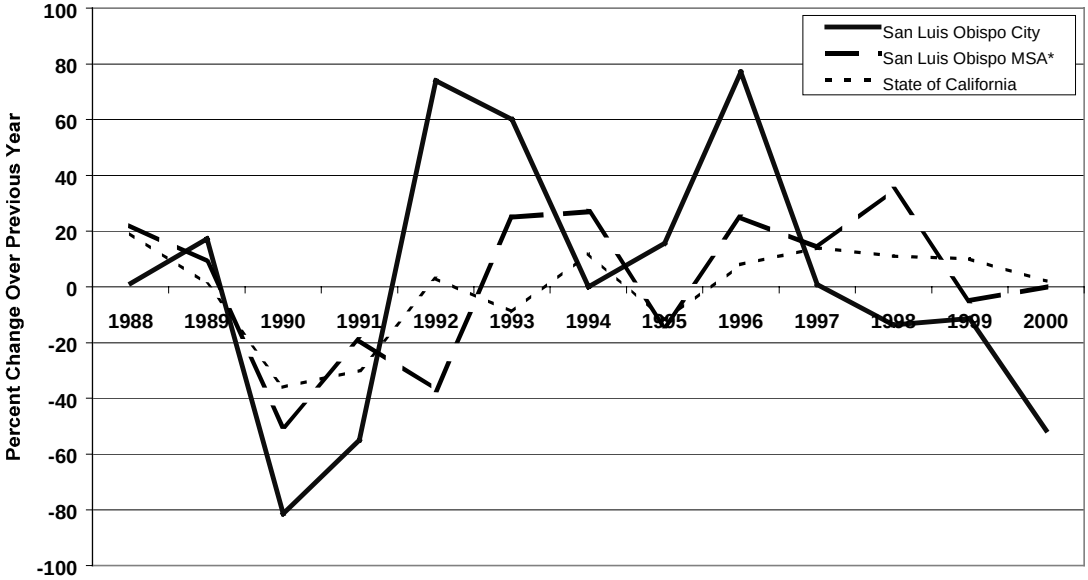
Source: City of San Luis Obispo Planning Department.

As shown in Figure 4.2, both the MSA and the state also experienced dramatic declines in single-family detached permitting, 50 percent and 36 percent, respectively. (The data used in this portion of the analysis are from different sources. Permit data for the City of San Luis Obispo are from the City of San Luis Obispo Building and Safety Division, while MSA and state permit data are from the U.S. Census Bureau which, in cases of non-reporting, uses estimates.) The increasing number of permitted housing units from 1987 to 1989 and the sharp decline in 1990 may in part be attributed to a pre-growth cap permitting rush, a temporarily saturated housing market and, later, the effect of the cap but, when placed in the context of statewide permitting a different story develops.

While the rate of change in building permits in the City generally exceeded the remainder of the MSA before 1996, since that time building permits have increased between 2 and 8 percent in the remainder of the MSA while permits in the City have experienced steadily declining rates of change.

Figure 4.2

SAN LUIS OBISPO CITY, MSA AND CALIFORNIA SINGLE-FAMILY BUILDING PERMITS, 1988 - 2000



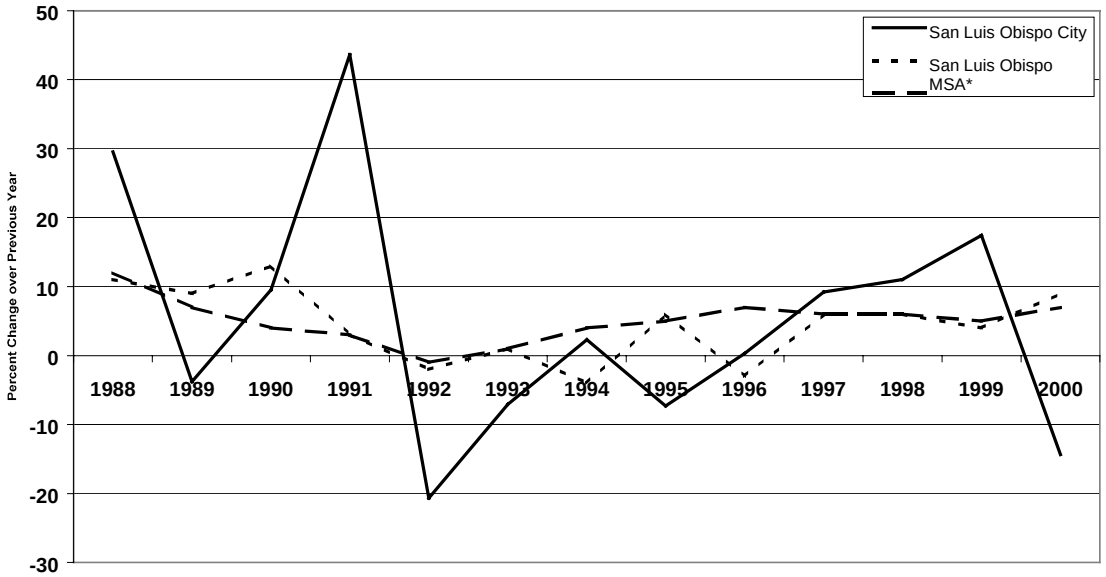
* San Luis Obispo-Paso Robles MSA, CA , equals San Luis Obispo County.
Source: U.S. Census Bureau, Real Estate Center at Texas A&M University, and City of San Luis

Impacts on Housing Prices

The percent change in average single-family building permit values in the City varied dramatically between 1988 and 1992, roughly coinciding with the increase and dramatic decrease in building permits (Figure 4.3). From 1992 to 1997 the change in the values in the City and the MSA are less than those experienced statewide. Since 1997, changes in permit values mirror those taking place in California, while values in the City experienced higher changes, until dropping dramatically in 2000.

Figure 4.3

SAN LUIS OBISPO CITY, MSA AND CALIFORNIA: CHANGE IN AVERAGE SINGLE-FAMILY BUILDING PERMIT VALUE 1988 - 2000



* San Luis Obispo-Paso Robles MSA, CA , equals San Luis Obispo County.
Source: U.S. Census Bureau, Real Estate Center at Texas A&M University, and City of San Luis

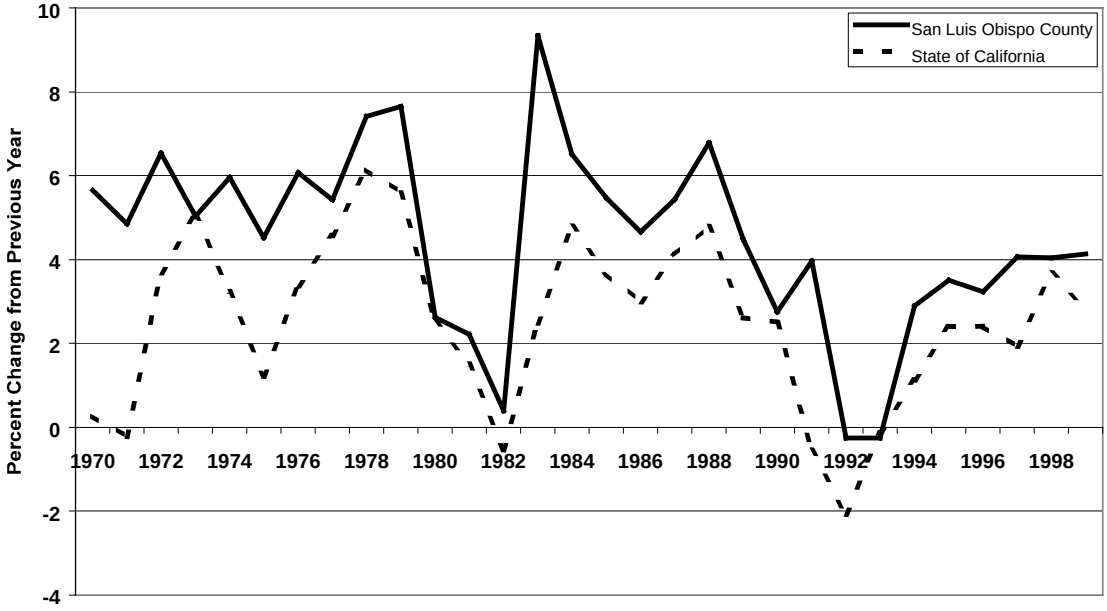
Employment and Income

Change in employment, while not a comprehensive analysis of economic conditions, is an indicator of regional demand and highlights the general economic condition in California and San Luis Obispo County (Figure 4.4). There are three distinct time periods to keep in mind while examining San Luis Obispo: the pre-growth ordinance period, roughly before 1980; the period of the Landis study, 1980-87; and the 1990 to 2000 time period. The last time period captures two decennial censuses and the implementation of the 1990 one percent growth limit.

Figure 4.4 shows the year-over year change in employment in San Luis Obispo County and the State of California. Both areas experienced slow employment growth preceding and into the early 1980's, during the national recession, followed by increases in excess of 9 percent in San Luis Obispo County in 1983. In San Luis Obispo County, these rates remained above 4.5 percent until 1989, when they began dropping to negative rates in 1992 and 1993, slightly after the national recession. Recovery began in 1994, with employment in the County increasing at a higher and more consistent rate than the State.

Figure 4.4

CHANGE IN EMPLOYMENT: SAN LUIS OBISPO COUNTY AND THE STATE OF CALIFORNIA 1970 - 2000



Source: Bureau of Economic Analysis.

Population Impacts

Table 4.1, shows that the City of San Luis Obispo grew at a much slower rate than the surrounding areas. The population increase of the City has consistently been at a lower rate than the remainder of the County or the County as a whole.

Table 4.1

San Luis Obispo City and County Population, 1970 - 2000

	Population			
	1970	1980	1990	2000
County of San Luis Obispo	105,690	155,434	217,162	246,681
City of San Luis Obispo	28,036	34,252	41,958	44,174
Remainder of County	77,654	121,182	175,204	202,507
	Percent of Total County Population in…			
	1970	1980	1990	2000
County of San Luis Obispo	100.0	100.0	100.0	100.0
City of San Luis Obispo	26.5	22.0	19.3	17.9
Remainder of County	73.5	78.0	80.7	82.1
	Percent Change in Population			
	1970 - 80	1980 - 90	1990 - 00	1970 - 00
County of San Luis Obispo	47.1	39.7	13.6	133.4
City of San Luis Obispo	22.2	22.5	5.3	57.6
Remainder of County	56.1	44.6	15.6	160.8

Source: U.S. Bureau of the Census, Decennial Censuses.

City population increased 5.3 percent between 1990 and 2000, from 41,958 to 44,174, compared to 15.6 percent in the remainder of the county and 13.6 percent in the County as a whole. The growth rates of all the geographic areas are much lower than the rates from the previous two decades. Increasingly smaller portions of the county population are residing in the City, from 26.5 percent in 1970 to 17.9 percent in 2000.

Housing Unit Impacts

A similar scenario is presented in Table 4.2, which shows changes in the number of housing units in San Luis Obispo City, County, and remainder of the county. Since 1990, the number of total housing units in the City outpaced the increase in population, 8.0 percent and 5.3 percent, respectively. In both the remainder of the county and in the whole county, population growth outpaced housing unit growth, at 15.5 percent compared to 14.7 percent for the remainder of the County and 13.6 percent compared to 13.4 percent for the entire County. Additionally, the City experienced much smaller increases in owner occupied units (4.5 percent compared to 21.3 percent in the remainder of the County, higher increases in renter occupied units (14.3 percent compared to 9.4 percent in the remainder of the County), and a larger drop in vacancy rates (27.9 % compared to 1.4 percent in the remainder of the county).

Table 4.2

San Luis Obispo City and County Housing Units, 1990 and 2000

			Change 1990 - 2000	
Total Housing Units:	1990	2000	Number	Percent
County of San Luis Obispo	90,200	102,275	12,075	13.4
City of San Luis Obispo	17,877	19,306	1,429	8.0
Remainder of County	72,323	82,969	10,646	14.7
Occupied Housing Units:				
County of San Luis Obispo	80,281	92,739	12,458	15.5
City of San Luis Obispo	16,952	18,639	1,687	10.0
Remainder of County	63,329	74,100	10,771	17.0

Source: U.S. Bureau of the Census, Decennial Censuses.

Related Research

John Landis's *Do Growth Controls Work* examines growth control efforts in seven California cities, including San Luis Obispo, between 1980 and 1987. The study compared population growth and other characteristics of growth control cities with similar cities that chose not to adopt growth controls. Landis found that while after five years some of the studies cities did have housing shortfalls, San Luis Obispo actually increased it comparative rate of housing construction by adding over 200 housing units than may have been constructed otherwise. Landis also concluded that growth controls established were at the initial two percent level, median single-family home prices did not rise any faster or to

higher levels in growth control cities than in comparison cities and that single-family home prices in three nearby rose faster than prices in the City.

Landis attributes the variation in effectiveness of growth controls partly to the restrictions of the growth control enacted – while some levels were stringent in comparison to recent home production levels, when compared to long-term historical trends they were only moderate limitations. In the case of San Luis Obispo, Landis suggests that the primary long-term effect of the growth controls was to even out the rate of development over time. Landis also believes that loopholes, such as the exemption of affordable housing, housing constructed by individual lot owners and the carry over of unused building allotments have also contributed to the failure of some growth control ordinances to limit development.

Levine estimates that about one-third of housing created in California during the 1980's was redistributed to other communities by growth controls. While recognizing a wide variability in the displacement effects, he attributes the variation to the effective enforcement of the ordinances and the types of zoning.

Boulder, Colorado

Situated 25 miles northwest of Denver, Boulder is the county seat for Boulder County and serves as a regional employment and retail center. The City of Boulder is one of three job centers for the nine county Denver Metropolitan area and is home of the University of Colorado, federal laboratories, and high-tech industries. In addition to its regional economic role, Boulder is nationally recognized for its innovative and aggressive planning efforts. These efforts began in 1959 with the adoption of the "Blue Line" which restricted growth on the mountainside bordering the city. The City was also the first city in the nation to enact a sales tax to support open space. Over the past 40 years, the City of Boulder has used a variety of tools in its efforts to control growth.

<u>Growth Control Efforts</u>

The City's current growth management approach incorporates growth boundaries, greenbelts, growth controls, service areas and cooperative planning with the county. The City and the County adopted a joint comprehensive plan in 1970 defining the area of water and sewer service that would be extended. This "service area" was refined in 1978 and creates an identifiable urban/rural edge that protects the City from growth outside of its boundaries that could create fiscal burdens for the city. While these planning actions sometimes result in sprawl and leapfrog development, the City and County appear to have created an effective demarcation between urban and rural development (Pollock).

In addition to growth management efforts, in 1976 the City of Boulder established a two percent a year growth cap, urban growth limits and a greenbelt. Boulder also experimented with a commercial growth limit between 1996 and 1999. Recognizing the potential of the city land use policies to displace growth to

surrounding areas, City efforts also include intergovernmental agreements with municipalities in the County that limit growth in their established planning areas.

Specifically, growth control efforts used by the City of Boulder include:

Commercial Growth Cap – Adopted in September 1995, the growth cap limited commercial growth in the city for five years. Initially set at 495,000 square feet of commercial growth, the cap would decrease to 385,000 in 2001 and distributed permits on a first come first serve basis and require an assessment of the projects proximity to transit and water and energy conservation practices (Narvaes). The commercial growth cap was abandoned in 1999.

Residential Growth Caps –Boulder used four distinct methods to allocate residential growth, including:

a. The Danish Plan (1976-1981)
Provisions of the plan included a following provisional growth rate of 2 percent or less, a limit of 450 dwelling units/year for projects of over 4 dwelling units in the City, and restrictions on growth outside the central area of the City. This plan was a competition-based system with projects having the best features (including proximity to urban services, provision of low and moderate-income housing design quality, etc.) receiving permits.

b. The "Trigger Plan" (1982-1984)
Residential permits were issued on a first-come, first-served basis until the number of permits reached a trigger point, at which time the allocation system switched to a competitive merit based system. The system worked well unless demand exceeded supply. Also, it is believed that competitive uncertainty hindered developers from making financial commitments.

c. Pro Rata System (1985-1995)
This approach featured quarterly allocations, with the potential for a pro-rata contingent in the event demand exceeded supply. If, for example, 200 allocations were available during any given period, and the builders requested 400, each development received half of its request.

d. Allocation Pools (1995-2000)
The spirit of the pro-rata system remained intact, while the details received an extensive overhaul. First, the growth rate was cut to less than one percent of the existing housing stock per year. Second, allocations were partitioned into pools designated for units meeting various affordability criteria. Third, projects geared toward mixed incomes were able to enter into allocation reservation agreements. The three allocation pools include permanently affordable, restricted (owner occupied and initially affordable), and unrestricted (market rate housing).

e. Pro Rata Revisited (2000)

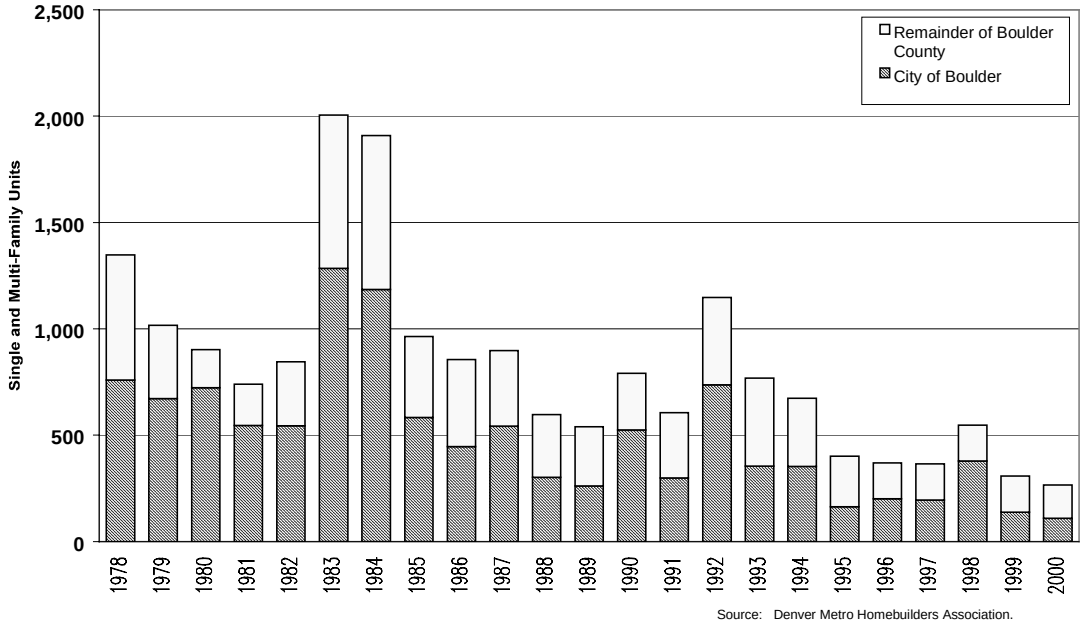
In response to the problems stemming from the allocation pools, the City returned to a simple pro-rata system, with the requirement that all new residential development contribute to affordable housing, with exemptions for mixed use, business or industrial zones, and developments with a specified level of permanently affordable housing.

Housing Units Permitted: Number and Valuation

As shown in Figure 4.5, the total number of residential permits issued in the County as a whole declined between 1978 and 2000. Permits issued declined from an annual average of 970 between 1978 and 1982 to 371 between 1996 and 2000. Between 1982 and 1984 - when the "trigger plan" was used to allocate building permits - the number of both City and County permits issued more than doubled from previous levels. A total of 4,564 residential permits were issued in the City during the following eleven years, 1985 to 1995, of "pro rata" permit issuance, with multi-family units comprising slightly less than one-third of the total. Permits issued by the City declined in 1995 when the "allocation pool" system was in place, with an average of 166 units being permitted annually between 1996 and 2000.

Figure 4.5

CITY OF BOULDER AND BOULDER COUNTY: SINGLE AND MULTI-FAMILY UNITS PERMITTED, 1978 - 2000



Source: Denver Metro Homebuilders Association.

The City's share of total County units permitted declined from 62.6 percent in the 1980's to 56.0 percent in the 1990's (Table 4.3). Multi-family units comprised a smaller portion of total housing units permitted in the 1990's than in the 1980's, dropping from 35.0 percent to 13.7 percent. This is due to significant declines in

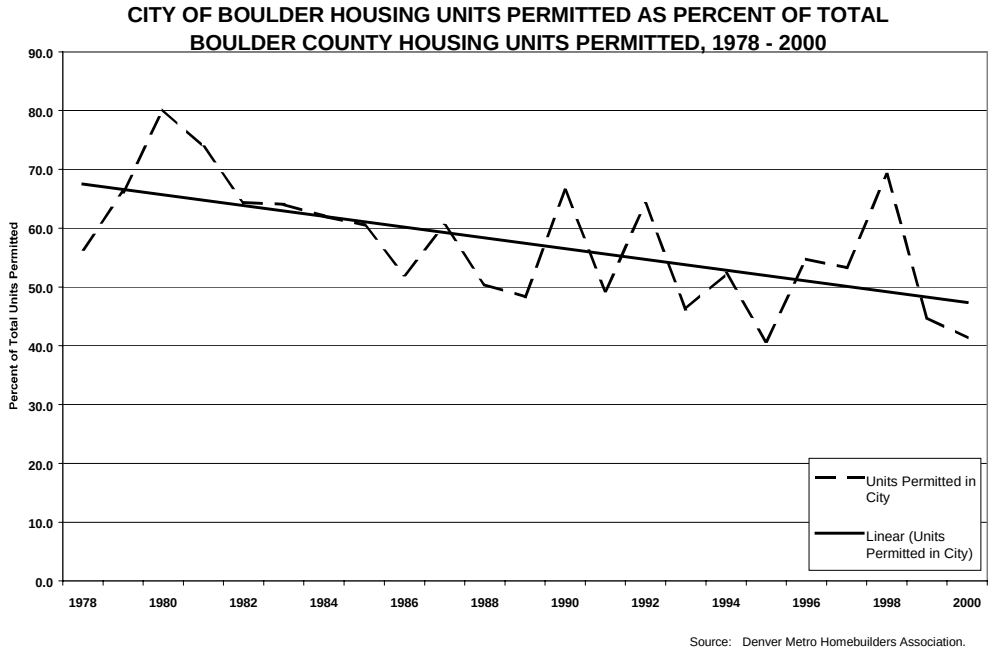
the number of multi-family units permitted in both the City and the remainder of the County (which had no multi-family units permitted in the 1990's). The number of multi-family units permitted in the City dropped from 2,820 in the 1980's to 817 in the 1990's. Figure 4.6 presents the percent of Boulder County housing units permitted in the City and shows the City's share of total units permitted decreasing roughly 20 percent from 1978 to 2000.

Table 4.3
BOULDER CITY AND COUNTY: SINGLE AND MULTI-FAMILY UNITS PERMITTED

	1980 - 1989		1990 - 1999		1980 - 1999	
	Units Permitted	Percent	Units Permitted	Percent	Units Permitted	Percent
Boulder County:	10,254	100.0	5,975	100.0	16,229	100.0
Multi-Family	3,593	35.0	817	13.7	4,410	27.2
Single-Family	6,661	65.0	5,158	86.3	11,819	72.8
City of Boulder:						
Total Units	6,415	100.0	3,344	100.0	9,759	100.0
Multi-Family	2,820	44.0	817	24.4	3,637	37.3
Single-Family	3,595	56.0	2,527	75.6	6,122	62.7
Boulder County Remainder:						
Total Units	3,839	100.0	2,631	100.0	6,470	100.0
Multi-Family	773	20.1	0	0.0	773	11.9
Single-Family	3,066	79.9	2,631	100.0	5,697	88.1

Source: Denver Metro Homebuilders Association.

Figure 4.6



Source: Denver Metro Homebuilders Association.

Housing Prices

The price increase of existing homes in the City of Boulder led the nation between 1991 and 2001, according to the Office of Federal Housing Enterprise Oversight (Denver Business Journal). The finding of a price increase is supported by data on median assessed home values, which, according to the Boulder County Assessor's Office, increased approximately between 9 percent and 19 percent annually for communities in Boulder County (Table 4.4). Smaller towns and villages have seen substantial increases in assessed values since 1990, especially the unincorporated town of Niwot (located in the hi-tech corridor between Longmont and Boulder) and Superior (approximately 5 miles southeast of Boulder on US 36). Niwot experienced a 108 percent increase in assessed value between 1990 and 2000, and Superior increased in excess of 300 percent.

Table 4.4

MEDIAN ASSESSED VALUES: SELECTED MUNICIPALITIES IN BOULDER COUNTY, 1990 - 2000

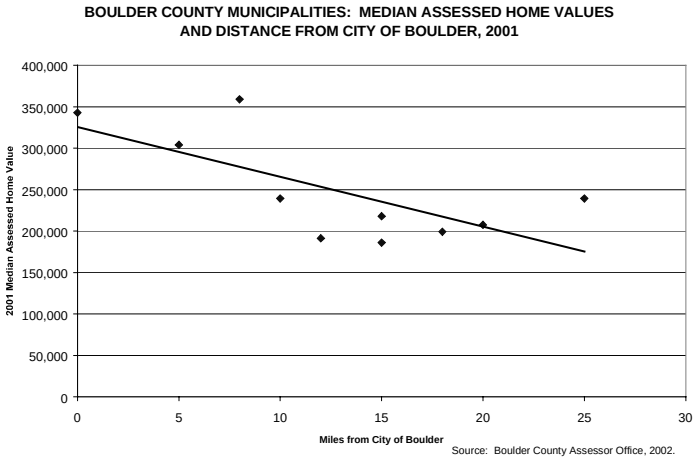
	1990	1992	1994	1996	1998	2000	Percent Change 1990 - 2000
City of Boulder	108,400	115,800	138,900	209,400	221,200	240,900	122.2
Broomfield	84,300	83,200	94,400	125,000	141,600	159,600	89.3
Longmont	75,300	73,800	83,500	117,500	132,700	146,100	94.0
Niwot	na	130,350	150,900	222,300	238,250	264,300	108.4
Superior	55,200	86,600	138,900	190,200	193,800	228,250	313.5

na - not available

Source: Boulder County Assessor's Office.

As shown in Figure 4.7, the proximity of a community to the City of Boulder appears to be related to its median home price. In 2000, the median assessed value for a home was $240,900 in the City of Boulder, which was, with the exception of Niwot (median assessed value of $264,300) the highest in the area. With limited local housing opportunities, the workforce has to find housing elsewhere, and adjacent communities become affordable bedrooms for Boulder.

Figure 4.7



Source: Boulder County Assessor Office, 2002.

Population and Housing Unit Changes

Decennial Census data, Tables 4.5 and 4.6, show the population and housing growth experienced by Colorado, the MSA, Boulder County and the City of Boulder from 1970 to 2000. The City of Boulder's population increase in the

1970's, 1980's and 1990's, between 11 and 15 percent in each of the decades, was much slower than for the remainder of the County. Population increase in the remainder of the County reached 73.7 percent in the 1970's, dropped to 24.1 percent in the 1980's and was just over 40 percent in the 1990's. Data on population change for the past thirty years show the slow increase in population that occurred in the City of Boulder - less than 42 percent over the thirty-year period - compared to the much faster rates of the state (96%); the MSA (97%); and the remainder of the County (202%). These population changes translate into a little over 1 percent per year for the City of Boulder, less than 7 percent in the remainder of the County, and over 3 percent for the MSA and Colorado. Also, the portion of the total County population living in the City of Boulder has decreased from 50.7 percent in 1970 to 32.5 percent in 2000.

Table 4.5
COLORADO, DENVER-BOULDER MSA, AND BOULDER COUNTY POPULATION, 1970 - 2000

	Population			
	1970	1980	1990	2000
State of Colorado	2,207,259	2,889,964	3,304,042	4,326,414
Denver - Boulder MSA	1,227,529	1,620,902	1,854,401	2,413,752
County of Boulder	131,889	189,625	225,339	291,288
City of Boulder	66,870	76,685	85,127	94,673
Remainder of County	65,019	112,940	140,212	196,615
	Percent of Total County Population in…			
	1970	1980	1990	2000
County of Boulder	100.0	100.0	100.0	100.0
City of Boulder	50.7	40.4	37.8	32.5
Remainder of County	49.3	59.6	62.2	67.5
	Percent Change in Population			
	1970 - 80	1980 - 90	1990 - 00	1970 - 00
State of Colorado	30.9	14.3	30.9	96.0
Denver - Boulder MSA	32.0	14.4	30.2	96.6
County of Boulder	43.8	18.8	29.3	120.9
City of Boulder	14.7	11.0	11.2	41.6
Remainder of County	73.7	24.1	40.2	202.4

Source: U.S. Bureau of the Census, Decennial Censuses.

Changes in regional housing units from 1970 to 2000 are shown in Table 4.6. As with population, the City of Boulder's share of total county housing units has decreased. In the 1980's and 1990's, the number of housing units in the City increased at higher rates than population, 19.8 percent compared to 11.0 percent in the 1980's and 12.3 percent compared to 11.2 percent in the 1990's. Possibly due to the 1995 Allocation Pool growth limit, housing unit increase averaged 1.2 percent per year, or 12 percent from 1990 to 2000. The remainder of Boulder County experienced a change in housing units of three times that of Boulder, while the MSA and State saw an increase of twice that.

Table 4.6
COLORADO, DENVER-BOULDER MSA, BOULDER COUNTY, CITY OF BOULDER HOUSING UNITS, 1970 - 2000

	Housing Units			
	1970	1980	1990	2000
State of Colorado	757,070	1,194,253	1,477,349	1,808,037
Denver - Boulder MSA	410,509	654,254	810,771	976,585
County of Boulder	44,307	74,638	94,621	119,900
City of Boulder	21,632	30,287	36,270	40,726
Remainder of County	22,675	44,351	58,351	79,174
	Percent of Total County Housing Units in…			
	1970	1980	1990	2000
County of Boulder	100.0	100.0	100.0	100.0
City of Boulder	48.8	40.6	38.3	34.0
Remainder of County	51.2	59.4	61.7	66.0
	Percent Change in Housing Units			
	1970 - 80	1980 - 90	1990 - 00	1970 - 00
State of Colorado	57.7	23.7	22.4	138.8
Denver - Boulder MSA	59.4	23.9	20.5	137.9
County of Boulder	68.5	26.8	26.7	170.6
City of Boulder	40.0	19.8	12.3	88.3
Remainder of County	95.6	31.6	35.7	249.2

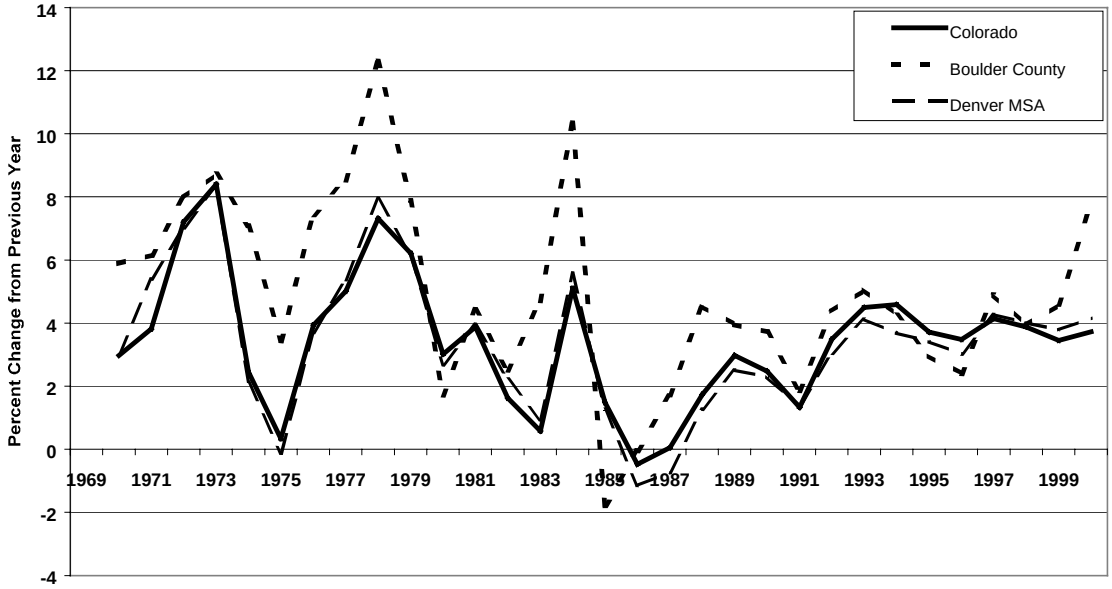
Source: U.S. Bureau of the Census, Decennial Censuses.

Boulder County Employment

Employment levels in Boulder County, the Denver MSA (of which Boulder County is part) and the state of Colorado provide economic context to the evaluation of the impacts of Boulder's growth control efforts. Changes in wage and salary employment in Colorado, Boulder County and the Denver MSA follow a similar pattern, though Boulder County experienced the most dramatic increases and decreases. Additionally, rates of change in employment in the County generally exceeded those of the MSA and State. As shown in Table 4.8, after a sharp decline in growth between 1979 and 1982, employment in Boulder County experienced two years of growth, reaching 10.3 percent in 1984. State, County and MSA employment crashed to negative rates between 1986 and 1988 and slowly recovered through the late 1980's. Since 1992, after two years of decreasing growth rates, employment has grown by an average annual rate of 3.9 percent in the State, 3.7 percent in the MSA, and 4.5 percent in Boulder County.

Figure 4.8

CHANGE IN EMPLOYMENT: COLORADO, BOULDER COUNTY AND THE DENVER MSA, 1970 - 2000



Source: Bureau of Economic Analysis.

Retail Sector

The number of commercial permits increased from 470 in 1992 to 5,582 in 1994, before declining to 4,377 in 1995, the year the commercial growth cap was adopted, and has steadily declined since imposing the commercial growth cap. As shown in Figure 4.9 (following page) while there was a slight increase in permits issued in 1999, when the cap was removed, the number of commercial permits issued continued to decrease in 2000 and 2001. Figure 4.10, also on the following page, show that for the first time since at least 1985, total retail sales in the remainder of the County have exceeded sales in the City.

The retail real estate market of Boulder is approximately 45 percent of the total real estate inventory for the City. The City continues to have a low vacancy rate in its retail real estate market, approximately 3.7 percent at the end of 1999 compared to almost 5 percent in the County (ERA).

According to the Boulder Urban Renewal Authority (BURA), core retail (apparel stores and general retail) suffered from competition from Flatiron Crossing Mall, (southeast of Boulder) and new retail in surrounding communities (Longmont). From 2000 to 2001, retail sales tax revenues at Boulder's Crossroads Mall were reduced by almost 40 percent and the City lost 2.5 percent. The Boulder Valley Regional Center lost 10 percent during the fourth quarter of 2001 and had not seen similar tax losses since the 1980's. BURA adds in its newsletter that the decline in sales and use revenues is attributable to September 11th, however

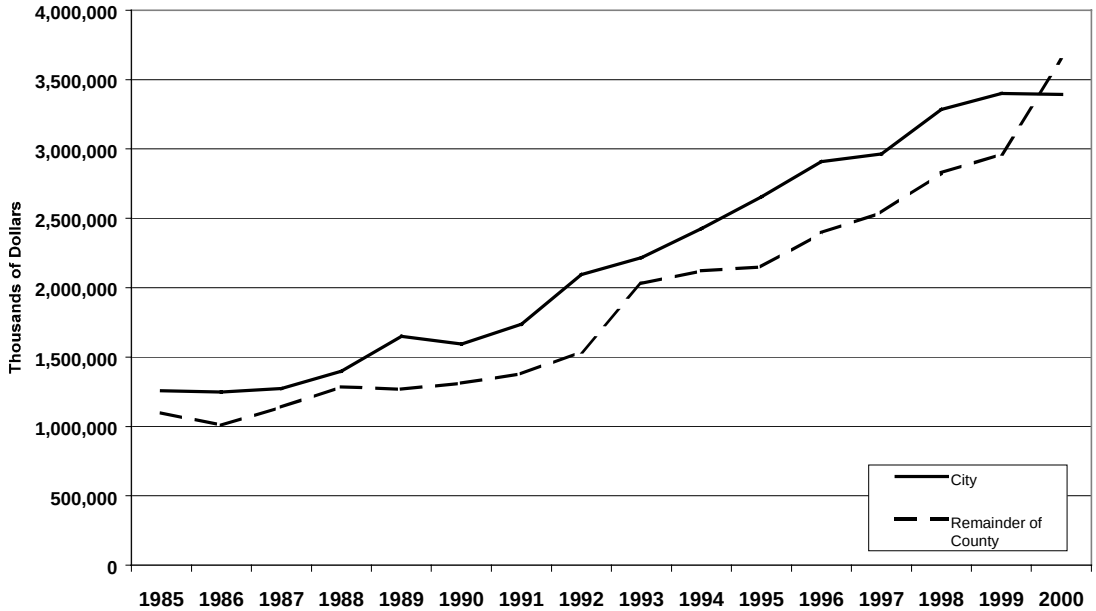
Figure 4.9

CITY OF BOULDER COMMERCIAL PERMITS, 1992 - 2001

Source: City of Boulder.

Figure 4.10

TOTAL RETAIL SALES FOR CITY OF BOULDER AND REMAINDER OF COUNTY, 1985 - 2000



Source: Colorado Dept. of Local Affairs.

revenues for the city were leveling off as early as 1999. The figure shows the leveling of retail sales in Boulder while the County continues to experience growth (Colorado Dept. of Local Affairs, 2002). This could possibly be due to the commercial growth moratorium or due to the limited amounts of commercial land available for development within the growth boundary.

Retail sales and use taxes are an important revenue source for the City, constituting 71 percent of revenues since 1988. In 2000, the City of Boulder was the only community in the Colorado Front Range (Colorado Springs to Fort Collins) to not have a gain in sales tax (Doug Smith, 2002). The City of Boulder recently launched a sales tax awareness campaign designed to inform Boulder residents of the critical city services that local sales tax revenue supports. The campaign, called "It Pays to Shop in Boulder," links common purchases to city services such as open space, transportation, parks and recreation, and library and arts programs (BVRC).

The reduction of commercial permitting, because of limits or other factors, may result in the inability of the City to capture additional tax base or promote affordable housing (Pollock). Many of the employees working in the City of Boulder commute from outside the city. As opposed to employment, shopping is done closer to home and surrounding communities (Superior, Longmont, Lafayette) appear to be meeting the retail needs of their residents and are diminishing Boulder's importance as a regional retail center. A report done by Economic Research Associates for the Boulder Valley Regional Center notes that the growing communities outside of the city are "looking to fulfill their community and neighborhood serving retail needs."

Summary

Since the 1970's the City of Boulder has experienced remarkably slow population and housing growth in comparison to the surrounding region. The number of housing permits issued by the City has declined steadily since 1980. Meanwhile the value of houses in Boulder has risen high enough in the past decade to lead the nation in price increase. Along those same lines, median home values for Boulder County decrease in relation to the distance from the City of Boulder.

With growth control ordinances in place, Boulder has maintained a steady population and housing growth rate of one percent per year for the past twenty years. The surrounding County, MSA and State have had growth rates of two to five times Boulder's in the past two decades. Boulder County had three-fold increase in the number of housing units compared to the City from 1970 to 2000. The City has seen a steady decrease in its share of the total housing units in the county as well.

Even with the City having a smaller share of the housing stock, Boulder County continues to serve as a regional employment center. The County outpaces the region and state for steady employment growth after the decline in the early

1990's. Commercial building permits in the City have declined over 70 percent since its peak in 1994, either due to the 1995 commercial growth cap or less availability of commercially zoned property in the City. Boulder maintains a low 4 percent vacancy rate in its commercial properties.

Retail sales taxes, which provide over 71 percent of Boulder's revenue, started to level off as early 1999. There is a belief that the role of Boulder as a regional retail center is deteriorating, as retail needs are now being met in adjacent communities. The once large regional mall, Crossroads, is almost empty and its sales tax revenues declined by over 40 percent in one year. The Boulder Valley retail core lost over 10 percent from 2000 to 2001 and the City as a whole lost 2.5 percent.

Thousand Oaks, California

Thousand Oaks, a city of more than 119,000, is located in southern Ventura County approximately 10 miles inland from the Pacific coast and about 50 miles northwest of Los Angeles International Airport. Thousand Oaks is the site of numerous corporate and regional headquarters such as Amgen, Inc. and the Bioscience Division of Baxter Healthcare Corporation and is also home to General Dynamics Corporation and Rockwell Science Center. WellPoint Health Networks, Inc., one of the nation's largest publicly traded managed care companies, General Motors Regional Office, Verizon Regional Office, Homestore.com and Netzero.com are also located in Thousand Oaks.

Incorporated in 1964, the City of Thousand Oaks was developed under stringent growth control. Over 12,000 acres have been set aside as open space. The area has been growing at 2 percent per year and is nearing build-out. Recent master planned developments are under construction, potentially adding 3,000 units of high quality homes and leaving about 300 acres of available land left for development in the City. The agricultural industry remains an important part of Ventura County's economy and identity and protecting agricultural resources has been an important part of Ventura County's policy history

Ventura County is a mostly affluent county of 753,000 residents immediately north and west of Los Angeles County. In 1969, Ventura County, its cities, and the Local Agency Formation Commission (LAFCO) agreed on the *Guidelines for Orderly Development* to channel urban development away from unincorporated areas. LAFCO placed a limit on the number and geographical arrangement of new cities and also strictly controlled the cities' "spheres of influence" (SOI)—adjacent territory cities will be permitted to eventually annex when developed. In the 1980s, most cities in the County also adopted annual caps on the number of housing units permitted.

<u>Growth Controls in Place</u>

Measure "A," Thousand Oak's Residential Development Control System as adopted by the voters in 1980 will be in effect through 2002. Measure "A" limits the amount of new residential housing development to 500 units per year, down

from 650 between 1990 and 1994. Measure “A” exempts 1) projects of not more than 4 residential dwellings; 2) four-plexes or lesser numbered multiple dwellings on a single existing lot; 3) single-family residential units on a single existing lot; 4) rehabilitation or remodeling or conversion to apartments; 5) housing for very low, low and/or moderate income or senior citizens, or federal, state funded or subsidized projects.

In November 1998, the Ventura County electorate to preserve open space and agricultural lands within Ventura County passed the Save Open Space and Agricultural Resources (SOAR) initiative. Under the Thousand Oaks ordinance, an urban restriction boundary was established around the City, coterminous with the City’s Sphere of Influence line. The ordinance created a new prohibition on most urban development outside of this urban restriction boundary until December 31, 2030, unless amended by a vote of the electorate.

Units Permitted

As shown in Table 4.7, the total number of units permitted has both exceeded and fallen short of the limits established in Measure A. In no year was the 650-unit limit encountered, though permitting has exceeded the current 500 unit limit each year. This is in part due to the exemptions and because unused allotments are assigned to a pool for future use. Development agreements have been included in recent years. These agreements are typically for larger projects which will be developed in "stages" and therefore require allotments over a multi-year period. Beginning in 1991 and ending in 1998, an average of 390 allotments per year were allocated to development agreements projects.

Table 4.7

CITY OF THOUSAND OAKS: SINGLE AND MULTI-FAMILY UNITS

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total Units	339	310	188	632	504	550	600	785	890	665	964
Single-Family	106	87	159	326	450	513	519	664	890	628	833
Multi-Family	233	223	29	306	54	37	81	121	0	37	131

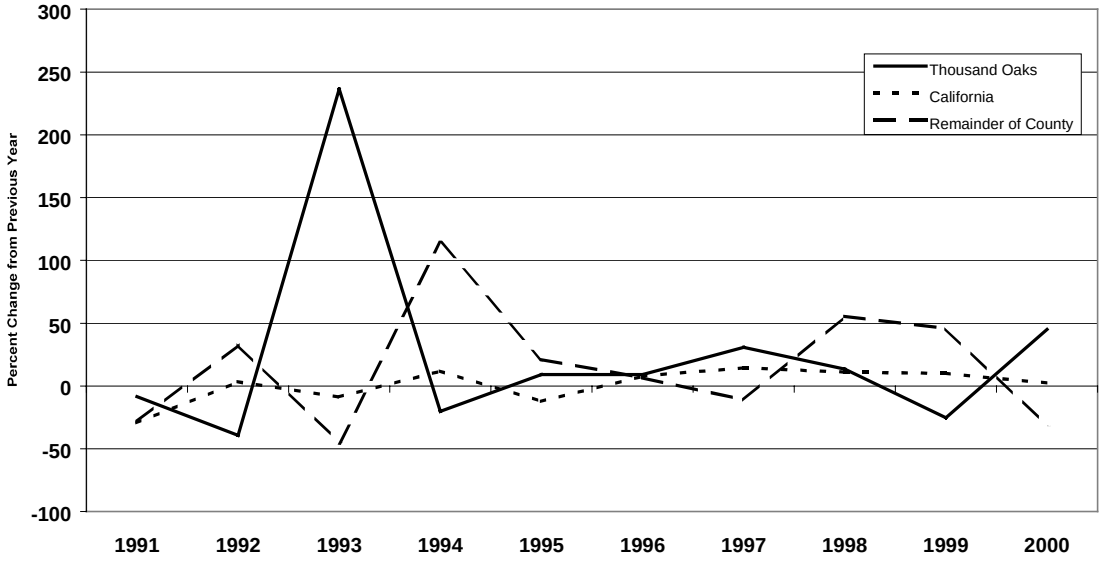
Source: City of Thousand Oaks.

Also worth noting are the similar patterns of permitting activity in Ventura County, Thousand Oaks, and the State of California (Figure 4.11). While the state and Ventura County move, for the most part, in tandem, Thousand Oaks shows opposing permit growth cycles using data starting in 1990.

In Table 4.8 on the following page, the distribution of single and multi-family permits is presented. Single and multi-family units were split almost evenly during the first period. Then, during the second period, single-family permits dominated with almost 91 percent of the distribution.

Figure 4.11

THOUSAND OAKS, REMAINDER OF VENTURA COUNTY AND CALIFORNIA: CHANGE IN RESIDENTIAL UNITS PERMITTED 1991 - 2000



Source: U.S. Bureau of Census and Real Estate Center at Texas A&M University, and Thouand Oaks City Community Development Department.

Table 4.8

THOUSAND OAKS: SINGLE AND MULTI-FAMILY UNITS PERMITTED, 1991 - 2001

	1991 - 1994		1995 - 2001		1991 - 2001	
	Number	Distribution	Number	Distribution	Number	Distribution
Total Units	1,469	100.0	4,958	100.0	6,427	100.0
Single-Family	678	46.2	4,497	90.7	5,175	80.5
Multi-Family	791	53.8	461	9.3	1,252	19.5

Source: City of Thousand Oaks Community Development Deparment.

Using the data presented in Figure 4.12, a trend line shows that Thousand Oaks has continued to hold around 30 percent of permits within Ventura County. This is in contrast to the distribution within Boulder and San Luis Obispo who saw their distributions fall. This may be attributable to the growth controls placed in both Thousand Oaks as well as the Ventura County.

Home Prices

Since the mid 1990's, median sales prices in the City and the Ventura County have been steadily increasing. With the exception of 1999, when the median sales price in Thousand Oaks fell, these changes have mirrored each other, including the decline in 1999 and 2000 (Figure 4.13 following page).

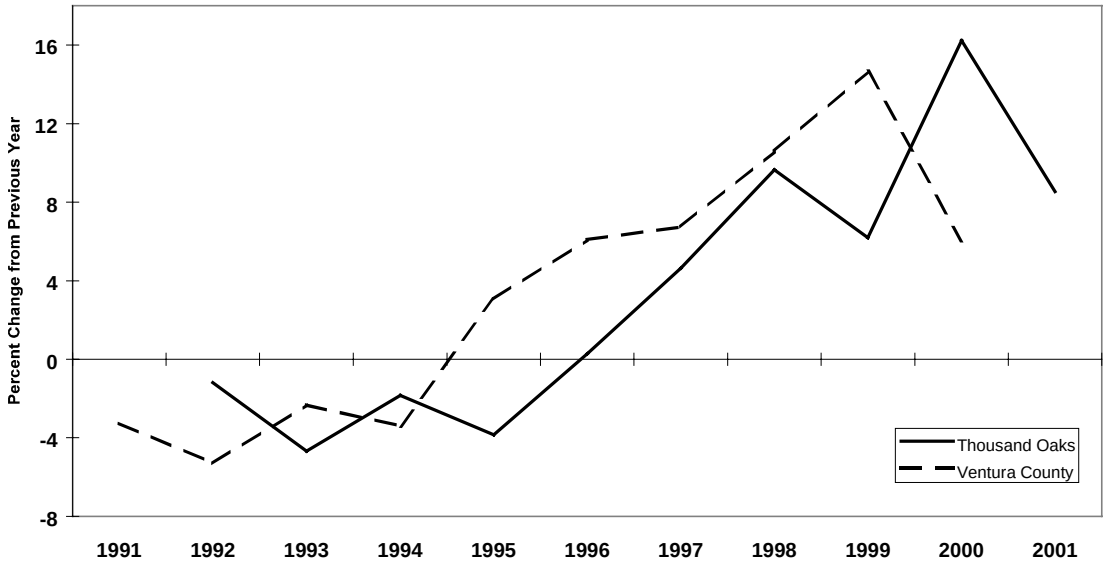
Figure 4.12

THOUSAND OAKS CITY RESIDENTIAL UNITS PERMITTED AS PERCENT OF VENTURA COUNTY TOTAL, 1990 - 2000

Source: U.S. Bureau of Census and Real Estate Center at Texas A&M University, and Thouand Oaks CIty.

Figure 4.13

PERCENT CHANGE IN MEDIAN HOME PRICE: THOUSAND OAKS AND VENTURA COUNTY, 1991 - 2001



Source: U.S. Bureau of Census and Real Estate Center at Texas A&M University, and Thouand Oaks City.

Population Growth

Table 4.9 shows the rate of population change for Ventura County as well as several cities within the county. Thousand Oaks ranks as the third fastest

growing area within the County with population growth of 12,624 persons from 1990 through 2000. As a percentage change, Thousand Oaks ranks sixth in the County, while Moorpark grew the fastest.

Table 4.9

POPULATION RATE OF CHANGE AND RANK: SELECT VENTURA COUNTY PLACES, 1990 - 2000

			Population Change		Percent Change	
Area:	1990	2000	1990 - 2000	Rank	1990 - 2000	Rank
Ventura County	669,016	753,197	84,181		12.6	
Thousand Oaks	104,381	117,005	12,624	3	12.1	6
Moorpark	25,494	31,415	5,921	7	23.2	1
Ojai	7,613	7,862	249	12	3.3	12
Unicorporated	86,520	93,127	6,607	6	7.6	10
Incorporated	582,496	660,070	77,574	1	13.3	5

Source: U.S. Bureau of the Census, Decennial Census.

Results of Growth Measures

Given the surge in housing permits issued between 1995 and 2001, the results seem ambiguous as to whether or not these growth measures actually controlled growth. In fact, even though permits issued during the period 1991-1994 fell short by 1,131, permits issued during 1995-2001 exceeded non-exemption limits by 1,458; thus even the allocation pool was overdrawn. This can be attributed to the exclusion of low income housing from the growth limits.

Further, housing prices have remained similar to the rest of the county, even though actual housing production within Thousand Oaks exceeded production in Ventura County. Finally, while employment rates tend to fall in growth control environments, Thousand Oaks has eschewed this expectation with rates similar or better than the State of California.

To assess the ability and willingness of local governments to accommodate new growth, researchers for the Reason Public Policy Institute reviewed housing trends, planning applications, and project approvals for 10 cities in Ventura County. In their report, more than 120 projects, encompassing almost 12,000 approved housing units (covering more than two-thirds of the approved permits issued), were analyzed. After reviewing these projects as well as current planning policies and forecasted future demand, the authors concluded that the County is unlikely to be able to meet future housing demand, and that a crisis in housing supply will occur prior to the growth limit's expiration in 2020 (Fulton, et al., 2001).

Research also found that the density of most projects was likely reduced during the pre-application stage of the project-approval process. Applications sought considerably fewer housing units than allowed under the General Plan. Then planning commissions and city councils reduced these densities by another 4 percent on average. Not all projects received equal treatment either. Affordable housing projects, multi-family projects, larger projects, and projects with plans tied to specific parcels of land were more likely to be approved at or near the capacity designated by planning policies, while smaller projects and projects in smaller cities tended to apply for and be approved at housing densities much lower than the capacities designated by planning policies (Fulton, et al., 2001).

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Appendix A: Census Tract Identification

SANTA FE COUNTY AREAS: CENSUS 2000 TRACT IDENTIFICATION

Central Region	Urban Area	Santa Fe City
1.01	1.01	1.01
2	2	2
3	3 (part)	3 (part)
4	4 (part)	4 (part)
5	5 (part)	5 (part)
6	6 (part)	6 (part)
7	7 (part)	7 (part)
8	8 (part)	8
9	9 (part)	9 (part)
10.01	10.01 (part)	10.01 (part)
10.02	10.02 (part)	10.02 (part)
11.02	11.02 (part)	11.02
11.03	11.03 (part)	11.03 (part)
11.05	11.05 (part)	11.05
11.06	11.06 (part)	11.06
11.07	11.07 (part)	11.07 (part)
12.01	12.01 (part)	12.01
12.02	12.02 (part)	12.02
12.03	12.03	12.03
13	13 (part)	13
102.01 (part)	102.01	102.01
103.02	103.02 (part)	103.02
103.04	103.04	103.04
103.05		
103.07	103.07	
103.08	103.08	
104	104	104
105	105	105
106	106	
107	107	
108		
9401		
9402 (part)		
9403 (part)		

"part" desingates tracts only partly in the area.

Appendix B: Methodology

Baseline Projections of Non-Agricultural Employment for Santa Fe County and the City of Santa Fe.

The New Mexico Department of Labor (NMDOL) produces current estimates of non-agricultural employment for the Santa Fe MSA. Monthly figures on establishment employment are based on an employer survey, but the series is re-benchmarked annually to actual employment as reported for workers covered by unemployment insurance. Periodically, the NMDOL conducts surveys of workers not covered for unemployment. The non-ag employment series are the most current and the most widely used data on work-site employment. All BBER's forecasts using the FOR-UNM model are based on the non-ag series.

In previous years, NMDOL produced annual estimates of non-agricultural employment for each of the counties. BBER has long-term series on non-ag employment for each of the counties and historically has used these series to county and sub-county estimates and projections. Beginning with 2000, however, the NMDOL stopped estimating non-covered employment and began publishing only the figures on covered employment. BBER has reasonably reliable figures on covered employment back to 2000 but we needed a longer series to do projections, which argued in favor of using the non-ag data and estimating Santa Fe County employment for 2000 and 2001. The MSA data for 2001 and BBER's forecasts for the MSA are also all based on the non-ag series.

The estimates of non-ag employment for 2000 were estimated from NMDOL data on Santa Fe County covered employment for that year and their estimates of non-ag employment for the MSA. Covered employment data exist only for the first quarter of 2001 and the sectoral detail for that quarter are in accordance with the new North American Industry Classification System (NAICS) and not comparable with those presented by SIC code in previous years. In estimating Santa Fe County employment for 2001, the first quarter numbers were consulted but more reliance was placed on the MSA re-benchmarked estimates, the historical series for Santa Fe and Los Alamos Counties, and our knowledge of developments in these counties.

To project the years beyond 2001, we performed a series of regressions of Santa Fe County non-ag employment (total and private sector) on employment (total and private) in the US and New Mexico, and of New Mexico employment on the US. For Santa Fe County, the fit with New Mexico was substantially better. We also examined the growth experience by decade and over the entire period, calculating compound annual growth rates. Over the long run (1960-2001), New Mexico grew annually at a rate that was 1.3 times the US rate. There was substantial variation from one decade to another and a decision was made to use the 1.3 figure. The calculated annual totals using this figure were compared with actuals and the performance was superior to any of the regression estimates produced. A similar analysis was done for Santa Fe County employment growth versus New Mexico. Over the past 40 years, Santa Fe's compound annual

growth has been 1.36 times that for New Mexico. However, growth during the 1990's was only 1.06 times that for New Mexico. Two scenarios were created for analysis, one in which Santa Fe growth over the next 10 years is 1.36 times that forecast for New Mexico and one in which Santa Fe growth is only 1.06 times that of New Mexico. The long-term trend scenario has county employment grow at a compound annual rate of 2.2%; in the 1990's scenario, the compound annual rate of growth is closer to 1.7%. It should be noted that BBER's latest forecast using the FOR-UNM model suggests that the growth path will be closer to the slower growth scenario.

Long-term projections of annual growth in US non-ag employment are from DRI-WEFA's long-term trend forecast that was put up on their website early in April, 2002, and is consistent with their March Baseline short-term forecast that was used in BBER's latest short-term forecast using the FOR-UNM model. The US projections were used as described above to forecast New Mexico employment to 2010. While these projections for 2002-6 are reasonably close to the ones produced by BBER using the FOR-UNM model, the FOR-UNM model forecasts for this period were judged to be superior and are used for forecasting Santa Fe County employment. Forecasts of NM employment for 2007 to 2010 are based on DRI-WEFA's projections for the US as discussed above.

The annual totals for Santa Fe County then had to be broken down into the growth forecast for the different industrial sectors. In developing the forecast by sector, we looked at trends in the historic sector shares, and used regression analysis to project these trends into the future. We also looked at trends in sector employment growth and at the growth in the sector's employment as forecast for the MSA by the FOR-UNM model. Preliminary projections were made for each sector. In some cases, e.g., services and retail, these projections were based on the total employment share; in others, on growth trends. Government was treated as a residual category, and the other sectoral estimates were then adjusted to yield the County forecast totals and to produce a credible projection for the government sector.

Finally, employment projections were prepared for the City of Santa Fe under both the trend and slower growth scenarios. Several sources of data were used to parse the employment within the City limits. The first source was the 1997 Economic Census which has estimates of employment within the City and Countywide for many industries. Where complete data exist on both jurisdictions, the percentage within the City limits is applied to the county employment estimates to generate a City estimate for 1999 and 2000. In some cases where comparable data were lacking, e.g., construction, data on taxable gross receipts were used to approximate the City's share of employment. In a few cases, estimates were checked against micro data from the DOL for reasonableness. Once the baseline estimates were made, trend data on the City's share of taxable gross receipts were used to adjust the City's share over time. Thus under the low growth scenario, employment within the City limits

grows at a compound annual rate of 1.15% versus the County figure of 1.74%. In the higher growth scenario, City growth is 1.6% versus 2.2% Countywide.

Modeling the Interactions Between Employment Growth and Commercial Development

Employment projections were translated into demands for commercial space by using employee per square foot ratios for different land uses as provided by the City Planning Department. Retail is assumed to require a floor area of 500 square feet per employee; office, 330 square feet per employee; industrial, warehouse and flex space, 1,000 square feet per employee.

The Planning Department also provided figures on the square footage permitted for different uses by the City since 1996. To verify the methodology, the figures on non-residential construction were compared with the demand for additional space implied by the estimated annual increases in employment in different sectors within the City limits. The fit was reasonably good. Thus, for example, the retail employment gains from 1991 through 2000 implied an average annual need for 150 thousand square feet of retail space. New retail space permitted in the 1996-2000 period – square footage data are not available for the early 1990's – averaged 147 thousand square feet per year. Similarly, the demand for office space related to employment gains (in services and FIRE) over the 1991-2000 period averaged 130,500 square feet per year. In addition, the growth in government employment generated demands for some 22,000 square feet per year. Some of this growth in government employment was accommodated by government building projects; however, some was met by leasing private commercial space. During the 1996-2000 period, 139,000 square feet of office space were permitted per year.

The employment growth by sector generates demand for additional commercial space. In the baseline scenario, we assume that the commercial development takes place and that this supports further growth in commercial activity.

The demands for additional commercial space cannot be met in the short-term under a building moratorium. These demands may or may not exceed the limits established in the water budget scenarios. If demand coming from the private sector and from the public sector (for government employees, half of which are assumed to be housed in leased space) exceeds the budget, then the space will not be built, construction employment will be less, and retail and service sector employment growth in the following period will be reduced because some new businesses will not open.

Modeling the Impacts of Restrictions on Hotel Room Construction

The two alternative scenarios that involve a water budget also put limits on the number of hotel rooms that can be built. Before attempting to model how additional lodging affects various economic variables, we analyzed historical data on absorption to see whether the market was saturated. (See the discussion

which follows.) The fact that lodgers tax revenues have continued to rise is itself indicative that there is still room to expand. To simulate the impacts of the limits on additional hotel rooms, we built a simple model relating employment in lodging establishments to the total number of hotel rooms within the City based on data from the 1990's. We then projected employment under three scenarios – the trend scenario in which, following the experience of the 1990's an average of 75 rooms are built per year, the slower growth scenario in which half as many are built, and a scenario in which no hotel rooms are built. The moderate water budget has no effect and lodging employment is as otherwise forecast. The tight limits, however, call for no hotel rooms to be built. The differences between the hotel employment forecast under the trend and slower growth scenarios and the zero hotel room scenario are estimates of the impact of this provision. The provision has an impact under both growth scenarios and the estimated loss in employment was subtracted from the annual projections. The employment table displays the impacts before and after the hotel room ban.

Analysis of Tourism Indicators for Santa Fe

Lodgers tax receipts for the City of Santa Fe grew from $3.4 million to $5.4 million between 1994 and 2001. This 58.8% rise in tax receipts amounted to an average annual increase of 8.4%. Between 1994 and 1999 tax receipts grew steadily at a 5% to 7% yearly rate, except for a 3% decline in 1996. However, in 2000 lodger's tax receipts advanced 27%, which was followed by a weak 2.5% increase in 2001. Each year receipts from lodgers tax are highest in the third quarter and lowest in the first quarter with the second and fourth quarters comparable.

Hotel occupancy rates for the entire City of Santa Fe were quite stable over the 1990-2001 period. They ranged from a low of 65.5% in 1996 to a high of 76.0% in 1993. In general occupancy rates measured in the low 70% range until 1995 when they ratcheted down to the upper 60% range. Beginning in 1993, data are available separately for downtown Santa Fe and Cerrillos Road. Downtown has seen an erosion of its average occupancy rate since 1993, a time when the overall economy was robust and the occupancy rate reached a high of 78.5%. By 2001 the occupancy rate in downtown dropped to 66%, falling off over 12 percentage points. Hotels along Cerrillos Road experienced a similar trend but at half the rate of decline, with a high of 70.7% in 1993 declining to 64.5%, a loss of about 6 percentage points.

Average daily room rates have increased moderately despite falling occupancy rates. Average room rates rose from $90 to $118 between 1991 and 2001 at a 3% average annual rate of increase over the ten years. The march upward was at a faster clip until after 1994, when the room rate was $111 and the Santa Fe economy slowed. Average daily room rates in downtown Santa Fe rose from $125 to $154 between during 1993-2001. At the same time, room rates along Cerrillos Road increased slightly, from $64 to $68.

Hotel Room Inventory. In 1990 there were 3,745 hotel rooms in Santa Fe. By 2001, the Santa Fe market had increased to 4,798. Santa Fe area posted a 28% gain in new room stock. Many of the 1,304 rooms added during this period were located in new hotels aimed at the lower to middle market strung along Cerrillos Road.

Analysis. Thus, hotels in downtown's luxury market charged more for a room over time and the consumer response resulted in lower occupancy rates even with few new rooms coming onto the downtown market. Cerrillos Road hotels, on the other hand, kept room charges relatively stable and occupancy rates slipped only modestly despite a substantial increase in supply of new hotels. The large increase in supply of new lodging establishments on Cerrillos Road created competition that helped to keep price increases down. In conclusion, Santa Fe managed to expand its overall tourism market during the 1990's, which has to be considered a success story.